ARCHITECTURAL REVIEW

A Magazine of Architecture & Decoration



Incorporating
THE
(RAFTSMANSHIP
SUPPLEMENT

Two Shillings and Sixpence Net.

9 Queen Annès Gate, Westminster, S.W.1.

Vol. LXX

August 1931

No. 417



THE PROGRESS OF MANCHESTER

The growth of a city is shown in its buildings, and in this respect, Manchester has reason to be proud.

Ship Canal House, King Street, for example, the tallest and one of the finest new commercial buildings, is truly a monument to Manchester's progress. It is included here as a worthy addition to the collection of pictures of twentieth-century buildings which we have published from time to time in our advertisements, not implying that our product TENTEST is used in all of them, but because of the interest they have for architects and builders, as examples of

modern construction. Corporations and municipalities are demanding new and improved methods. TENTEST gives solid advantages in regard to even temperature and quietness, at little or no extra cost. Then, besides being the most effective insulating board on the market, it has exceptional properties which absolutely prevent condensation. This is a problem of special significance in the humid climate of Lancashire.

Details of the many uses of TENTEST will be gladly supplied by the proprietors:

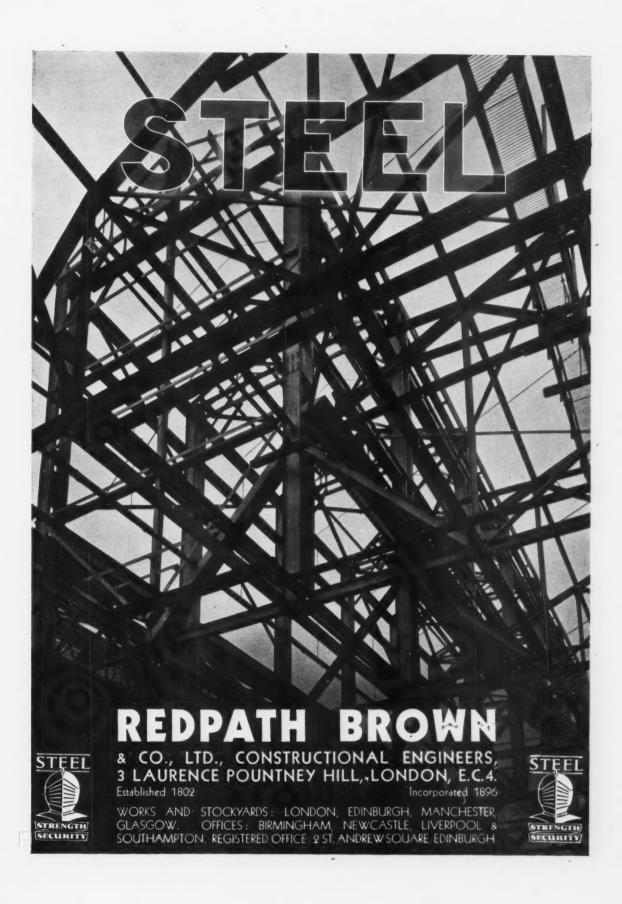
THE TENTEST FIBRE BOARD CO. (1929) LTD. 'Phone: Holborn 8018/8019



ASTOR HOUSE, ALDWYCH, LONDON, W.C.2







THE

ARCHITECTURAL REVIEW

A Magazine of Architecture & Decoration

Vol. LXX, No. 417

August 1931

CONTENTS

	PAGE		PAGE
BRIGHTER LONDON STATUE By William Gordon	S	THE FILMS: Film Inquiry: Number T	
THFATRE MACHINES IN ITALY, 1400 1800.—II. By Edward Carrick		Oswell Blakeston	47
THE NEW HEAD OFFICES OF LLOYD BANK, CORNHILL, LONDON. De signed by Sir John Burnet and Partner in association with Campbell Jones, Sons	3	A FREE COMMENTARY. I	
and Smithers	31	THE ARCHITECTURAL SUPPLEMENT	
MALMAISON RESTAURANT, STRAT TON STREET, LONDON. Designed b Michael Rosenauer	У	A BRONZE EXTERIOR GE THE MALMAISON RESTA	
NEW WHITGIFT GRAMMAI SCHOOL, SOUTH CROYDON, LON DON. Designed by Leathart and Grange	-	AT CLOSE RANGE. The the Malmaison Restaurant	Staircase at 50
BOOKS: The Book of the Month. Twelve Modern Architects. By Joseph Thorp		COLOUR IN INTERIOR DECC By John M. Holmes. V.— action	
The Growth of the Individual Mind a shown in the History of Pattern .		THE CRAFTSMAN'S POR No. 60. The Figure in Sculpt	
ANTHOLOGY: MARGINALIA:	TR	ADE AND CRAFT:	A LONDON DIARY:
Page 55 Page 56		Page lxii	Page lxvi

D1 ..

Ple	ates	
CONGRATULATIONS, MR. STREET! From a	A GREAT GERMAN ARCHITECT Plate X	
painting by John Greenidge	CUXHAVEN HIGH SCHOOL, GERMANY. Designed by Dr. Fritz Schumacher. With notes by P. Morton Shand	
Articles, photographs, or drawings sent with a view to publication will be carefully considered, but the Proprietors will not undertake responsibility for loss or damage. All photographs intended for reproduction should, preferably, be printed on albumenized silver paper. All articles and illustrations should bear the name and address of the sender, and postage should be sent to cover their return.	The Editor disclaims responsibility for statements made or opinions expressed in any article to which the author's name is attached, the responsibility for such statements or opinions resting with the author. All communications on Editorial matters should be addressed to the Editor, The Architectural Review, 9 Queen Anne's Gate, Westminster, S.W.1.	

Prepaid Subscription Rates

United Kingdom, £1 5 0 per annum, post free. U.S.A., \$8.00 per annum, post free. Holland, Guilders 18 per annum, post free. Italy, Live 150 per annum, post free. Elseuhere Abroad, £1 5 0 per annum, post free. Cheques and Postal Orders should be made payable to The Architectural Press, Ltd., and crossed Westminster Bank, Caxton House Branch.

Subscribers to The Architectural Review can have their volumes bound complete with Index, in cloth cases, at a cost of 10s. each, or cases can be supplied separately at 4s. 6d. each.

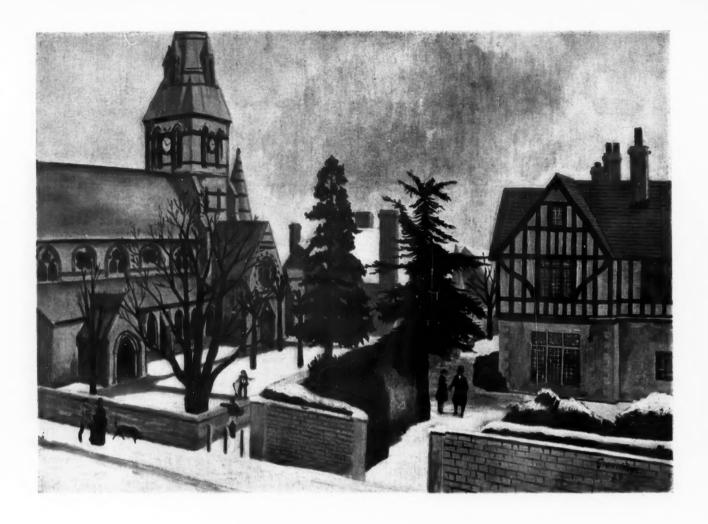
An Index is issued every six months, covering the months of January to June and July to December, and can be obtained, without charge, on application to the Publishers, 9 Queen Anne's Gate, Westminster, S.W.I.

THE ARCHITECTURAL PRESS, 9 Queen Anne's Gate, Westminster, S.W.1.

Telephone: 6936 Victoria (3 lines).

Telegrams : "Buildable, Parl, London."





CONGRATULATIONS, MR. STREET! From a painting by John Greenidge.

On the twentieth of June this year, the bells should have pealed from the towers and spires of the Law Courts, SS. Philip and James Church, Oxford, St. John's, Torquay, and many more of his churches, for the hundred-and-first anniversary of the birth of Mr. G. E. Street. He died in 1881, aged 51, overcome by the acrimony and strain of his work on the Law Courts. In this picture of SS. Philip and James Church, and a house in Winchester Road, North Oxford, Street is seen in a brown overcoat receiving the congratulations of a clergyman on the completion of the church. This was a significant

event, for SS. Philip and James is the mother-church of North Oxford, the Mother of Garden Cities. The house, in whose garden Mr. Street and the clergyman are standing, and whose roof—still of the same brilliance as on the day of its construction—is engagingly denuded of snow, was a pioneer of the half-timbered villas which are covering England today. And in North Oxford itself, the strange uneven houses, lavishly arranged along roads whose names and windings convey all the intricacies of medievalism, are a last tribute to the concerted efforts of the Gothic Revivalists.

PLATE I. August 1931.



Brighter London Statues.

By William Gordon.

mind. It should inspire admiration and encourage thoughts above the pedestrian level of the street. Each time we pass a statue we should be raised for a brief moment to the height of demi-gods and walk on elated and refreshed. At present, there certainly lies no inspiration in London's overwhelming wealth of statuary. Monuments have greater pretensions than the average pedestrian, but in all of them their failure is lamentable. They are erected to commemorate great men and great actions, but they do it inadequately. They are intended to encourage others to do likewise, but it would be a man with a malformed mind who could be inspired by one of those dreary horsemen hardly distinguishable from the grey background in front of which he stands.

I have three suggestions to make which would, if carried out, brighten up the whole aspect of London, enable us to have a modicum of art in the streets, and be of a practical and beneficent nature.

To deal first with one of the most numerous types of sculptured pomposity—the generals and statesmen of the last century. It is with these equestrian and military figures that there is most scope for enlivening the omnipresent gloom. This group consists largely of generals plumed and spurred astride traditionally spirited horses, or else of statesmen standing or seated in attitudes suggestive of noble and profound thought, dignified and dramatic oratory.

These figures shall be painted; and by painting them, we shall outwit our forefathers who planned to make London so dingy by perpetuating such a galaxy of their heroes. From ghoulish creatures we shall turn them into spirited symbols. They will not be painted in grey and brown as dictated by natural semblance, but in bright and even garish colours. A paint that is lacquer-like and glossy will be used and, after they have been painted, they shall be sprayed at frequent intervals with powerful hoses so that no speck of dirt shall mar their military cleanliness. To see a general having his beard and nostrils hosed would be worth getting up early in the morning.

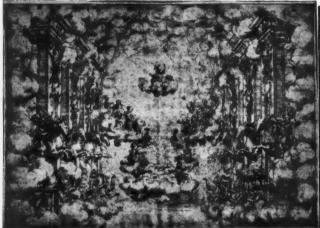
So we shall have instead of dingy, hardly perceptible figures, black, shiny horses, chargers creamy white with golden hooves ridden by men in the most gorgeous uniforms imaginable-yellow, blue, and scarlet. There shall be no traditional fidelity; if the original uniforms were drab they will be changed to emerald-green and purple. Paint will transform these figures from their long-past moribund state into lively fantastic creatures resembling to some extent huge porcelain figures. They will be a perpetual joy to those who ride past them on the tops of buses. A feeling of joy and recklessness will come over all those who see them. Drivers will steer their buses along Knightsbridge

STATUE should arrest the eye and fascinate the in long, graceful curves and draw up at the stops with a fine clatter of brakes in emulation of soldiers thrusting swords into scabbards. A magnificent figure at the top of Queen's Gate will speed up the traffic as if for a cavalry charge. Trafalgar Square will become a riot of glory. The Nelson Column, an even more patriotic emblem in stripes of red, white, and blue, will be surmounted by Nelson himself smarter and brisker in navy-blue coat and white breeches, looking out for ever over the capital of a maritime power, one hopes a more faithful symbol than at present. The rest of the Square hardly bears thinking about, so much scope is there for brighter London and Empire painting.

My other two suggestions deal with those nineteenthcentury statues which do not deserve the fantastic gay treatment of shiny paint. There are numerous lawyers, legislators, and public benefactors standing stiffly and solidly all over London, who have faded so completely from the public mind that their names are only to be found in obscure works of reference; perhaps the most memorable of all is Huskisson, and he only because of his passive gesture of having been run over by the first railway train.

My two proposals dealing with this type of figure are simple, A square of cement will be built up on the base of the statue and then faced with a good stone. Artists, and by that I mean such men as Mr. Epstein and Mr. Eric Gill, shall be commissioned to carve bas-reliefs on them. Subjects symbolical of the four seasons, agriculture, the dominions and colonies would be perfectly suitable, but what they carve shall be left to the artists' discretion, nor shall they be interfered with by art commissions or other busybodies. The merit of this suggestion is very great, for it guarantees a certain amount of good art in the London streets, which will contrast well with the painted extravagancies.

My third suggestion is of a practical and utilitarian nature. In those places where the statues of statesmen gather too thickly, or where bas-reliefs cannot be properly seen and appreciated, the statues will also be covered by a cement square, but this time it will be used for the display of the better advertisements, or serve as backgrounds for kiosks for the sale of newspapers, flowers, and fruit; others will be cut down or blown up and, on the places where they stood, shall be erected four pillars with a roof or awning and perhaps movable glass walls, and here people will be able to enjoy tea, coffee or koumiss, and have at the same time a good view of the traffic and bustle around them. The cry for cafés will thus be appeased, and the erection of such a series of oases in our midst will prove a blessing to those who are footsore and seek a short rest; to which the inclemency of the weather, the narrowness of our pavements and the strictness of our by-laws and regulations, will be no obstacle.



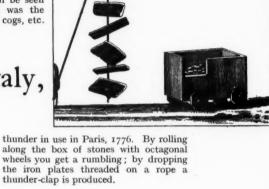




points of similarity will be noticed between the pen drawing in the Biblioteca Palatina at Parma (1), attributed by the author to Gasparo Mauro. 1650, and the engraving of one of the scenes from L'ETA DELL ORO (2), performed in Parma in 1690, which was designed by Domenico Mauro. The machinery used to make up these celestial court scenes can be seen in Plate III. The reason for so many clouds in these scenes was the necessity for covering up the large number of supports, pulleys, cogs, etc.

Theatre Machines in Italy, 1400-1800.—II'

By Edward Carrick.



(3) THUNDER was achieved in the Theatre du Palais Royal, in 1776, by pommelling a sheet of iron with padded fists.

(4) Two other methods of producing

N 1690 the Teatro Farnese once again was the scene of festivities, this time in honour of the marriage of Odoardo Farnese with Princess Dorotea Sofia of Nuremburg. The theatre was opened on May 25 with a most gorgeous spectacle entitled Il Favore degli Dei, the libretto by Aurelio Aurelj and music by Bernado Sabadini; the scenes were designed and painted by Domenico Mauro of Venice and Ferdinando Galli of Bibiena; the machines, which were great in number, were the inventions of Gasparo and Pietro, brothers of Domenico Mauro. The three Mauro brothers, as well as being architects of note, were some of the most audacious machinists of their times; there was nothing they would not undertake. There is in the Palatine Library at Parma a most superb collection of thirty-nine drawings for machines which are indexed as follows:

'Disegni originali di Machine e di scene teatrale del Secolo XVII, con poche note in qualche margine dei loro Autori, e in parte probabilmente esiguti per Teatro Farnesiano." These are numbered consecutively and are by the same hand, but that none of them were designed for the Teatro Farnese is obvious. That they are of Venetian origin and were designed for a small Venetian theatre is proved by the presence of a plan with a scale of "Venetian feet," and the fact that all thirty-nine designs are worked out to that plan. There is also a design for a curtain which shows the winged lion of St. Mark above the letters VV interlaced, meaning "Viva S. Marco." Professor Glauco

Lombardi has said that they are designs for the performance of 1628 in Parma, but one of the designs (Plate II) is of a machine by which a number of wings could be slid backwards and forwards by a windlass, worked from under the stage through which the wings passed; this machine was invented by Giacomo Torelli in Venice between 1640 and 1645!

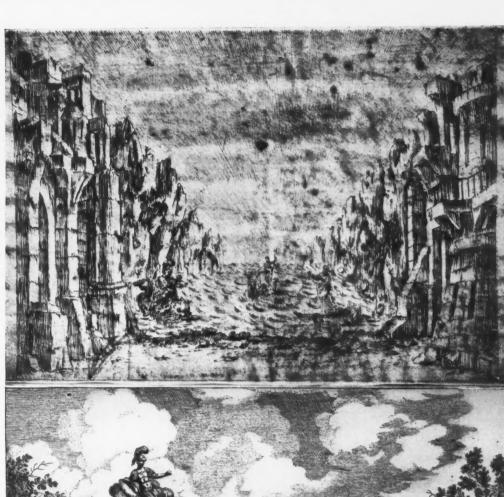
Giacomo Torelli was born in Fano in 1608; he studied architecture and mechanics and took to the theatre. Being rich and longing to parade his talents, he built himself a theatre in Venice in the year 1640. It was called the Teatro Novissimo, and in it he displayed the most extraordinary machines of his age. From this theatre came all the inventions that were used in the European theatre for the next two centuries; some are even used now. The most famous of his inventions was the idea I have already mentioned for moving wings. John Evelyn was in Venice in 1645 and saw some of his wonders and wrote:

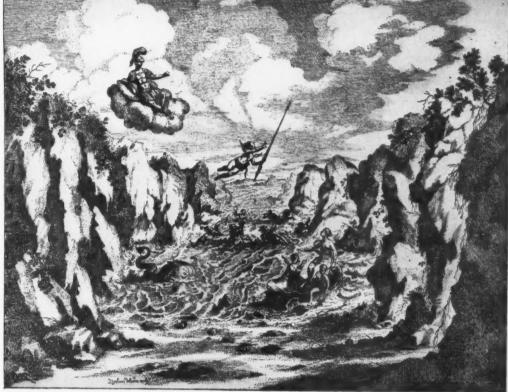
We went to the opera where comedies and other plays are represented in recitative music, by most excellent musicians, vocal and instrumental, with variety of scenes painted and contrived with no less art of perspective and machines for flying in the air, and other wonderful notions; taken together is one of the most magnificent and expensive diversions the wit of man can invent. . . . The scenes changed thirteen times. . . . This held us by the eyes and ears until

These achievements soon acquired for Torelli the nickname of "lo Stregone," the Sorcerer; at the same time his extreme conceit, and the fact that he was drawing away audiences from other theatres, was the cause of his being waylaid one

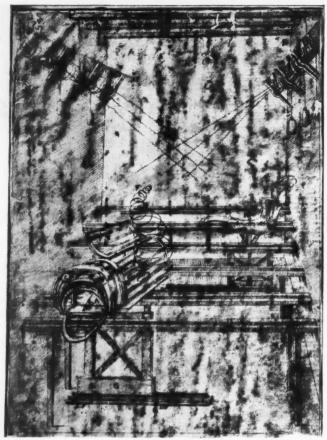
¹The first article was published in the July issue.

night and his hands were badly cut in a fight. In 1645 Ranuccio II Farnese sent him to France and he introduced machines into the French theatre for the first time. The French, of course, went machine mad and Torelli grew rich. Through intrigue, however, he was sent from the country in 1660, his place having been taken by Gaspare Vigarani who, out of jealousy, burnt all Torelli had left behind! Torelli returned to Fano and there built himself another superb theatre. He had two pupils, Tomaso Giusti and a certain Amandini, both of whom became celebrated architects and theatrical engineers. In Venice, after Torelli left in 1645, the only machinist of note was G. B. Balbi, but there was also a Gasparo Moro (sometimes spelt Mauro) who made alterations to the Teatro S. Giovanni e Paolo. Now I find by comparing the Venetian theatre plan that is among the set of machine diagrams in Parma, with a plan of the Teatro S. Giovanni e Paolo in the collection at the Soane Museum, that the two prosceniums are exactly the same in shape and size. By comparing also some of the designs in the Parma collection with the engravings of the scenes for the 1690 performance in Parma, it is noticeable that there is a great similarity between them. The exuberant caryatides that Gasparo Mauro and his brothers were so fond of, are very evident in both. Historical evidence about the Mauro, or Moro, family is very incomplete, but when it is strengthened I feel it will add tremendously to the value of the Parma drawings, for I think it will prove that these machine drawings are the work of the Mauro brothers and their father, Francesco, and that they are copies of, or were made from the knowledge of, Giacomo Torelli's machines used in Venice from 1640 to 1645. It is probable that the brothers brought these drawings with them to Parma in





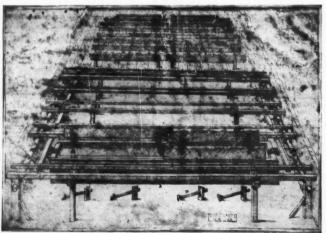
As in the case of illustrations (1) and (2), there is strong similarity between these two scenes (5) and (6). Note, for instance, the sea monster on the left in both, the Venus on the right, and the general lay-out of the rocks and sea; (5) is one of the pen drawings in the collection of thirty-nine DESIGNS OF SCENES AND MACHINES in the Biblioteca Palatina at Parma, and (6) is an engraving of one of Domenico Mauro's scenes for L'ETA DELL ORO.



(7) The workings of a SEA MONSTER and the SHELL OF VENUS, which it is interesting to compare with (8) and also with (5) and (6). Attributed by the author to Gasparo Mauro,



(8) A scene designed by Domenico Mauro, from $IL\ FAVORE\ DEGLI\ DEI$, performed in Parma in 1690. (9) A design attributed by the author to Gasparo Mauro, showing how moving WAVES were made. The cut boards (C) were kept moving with a circular motion on the zigzag iron bars which coupled them together; (B) was a long box in which tritons and nymphs stood; this box was kept moving also by alternately pulling the windlasses (A)(A) on either side of the stage. It is interesting to compare this method with illustration 9 and Plate VI, published in the first article.



1690 and left them for the future reference of the Parmese mechanics. Someone, at a later date, worked on them and made a second series of designs with added machines, and these are also at Parma, and are very obviously eighteenth-century. In Professor Glauco Lombardi's superb Farnesian collection at Colorno are to be found a number of very large drawings for machines; they are evidently working drawings and some are obviously enlarged copies of those in the Palatine Library, possibly made for the carpenters to work from in 1690.

The Mauro, or Moro, family were all architects and machinists and came from Venice. I have so far traced nine of them: Francesco; his three sons, Gasparo, Domenico and Pietro, and five others; Girolamo, Alessandro, Romualdo, and two Antonios. Gasparo, however, was the most important; after working in Venice, where in 1659 he altered the Teatro SS. Giovanni e Paolo, he went to work for Duke Ranuccio I of Parma in 1669. In 1679 he was back in Venice making Scenes and Machines for the Teatro Grimani. In 1685 he went to Munich with his brother Domenico. The machines which they made for the performance of Servio Tullio given there in this year made them famous. Five years later, together with their brother Pietro, they went to Parma to superintend the machines used for the Favore degli Dei, the Gloria d' Amore, etc.

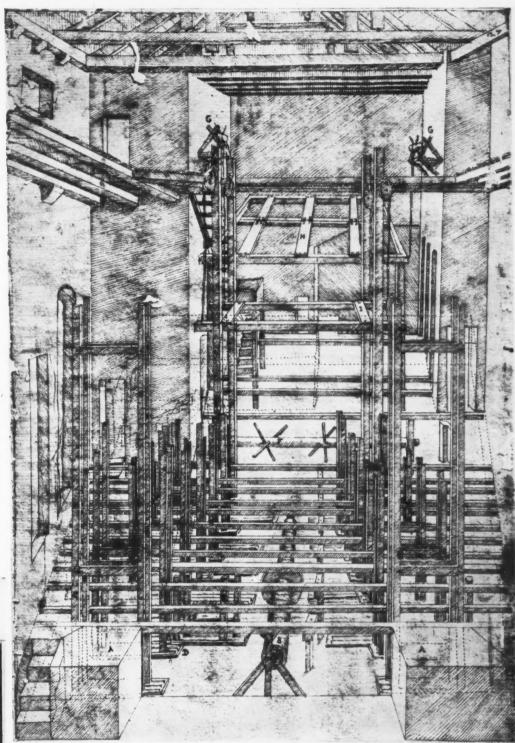
After the tremendous feats of mechanics by Torelli in Venice and Paris, and the Mauros in Munich and Parma, there seems to have been a lull. In France the Torelli tradition was carried on with a few additions by Vigarani (who pretended to have nothing to do with it), and later by Servandoni and numerous French engineers who wrote theoretically on the subject. In the great Diderot <code>Encyclopædia</code> are numerous plates showing how well the tradition was still kept up in France in 1776, the additions being very slight. In Italy the Bibienas followed on with the Torelli tradition, making no alterations at all; their chief addition to the theatre being the introduction of cut cloths and painting scenes at a different perspective angle, often putting the vanishing point at the sides instead of everlastingly in the middle, as had always been the way previously.

With the nineteenth century things got worse. Unskilled craftsmen were trying to manage machines a century old. Gustave Chougnet writing about Rossini's *Mose in Egitto* produced in Naples in 1818 says:

The scene of the darkness was another step onwards, and the whole work was much applauded, with the exception of the passage of the Red Sea, the representation of which was always laughed at, owing to the imperfection of the theatrical appliances already spoken of. At the resumption of the piece, therefore, in the following Lent, Rossini added a chorus to divert attention from the wretched attempt to represent the dividing waves, and it is to the sins of the Neapolitan stage mechanics that we owe the universally popular prayer "Dal tuo Stellato soglio."

And now, here we are in the Mechanical Age and, with the exception of our lighting equipment, our theatrical machinery is years behind the times. In England we still use many of Torelli's gadgets that have come to us via France. But then Sir Oswald Stoll is the only man in the country who has troubled to advance the mechanics of the theatre. When a new Torelli or Mauro comes into the theatre again the Cinema will have a serious rival. The new Torelli or Mauro will not have to bother so much about flights as about quick changes and many of them; for, even with our antiquated Japanese turn-table stage and the best trained staff to be found, we are far too slow for 1931.

NOTE.—My thanks are due to Dott. Giovanni Drei and Dott. Pietro Zorzanello of The State Archives and Palatine Library in Parma, who so kindly placed so many documents at my disposal; also to the Directors of the British Museum, and to Mrs. Maria Petrie for translating the Furtenbach extracts.—[E. C.]



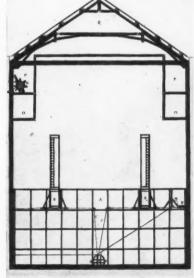
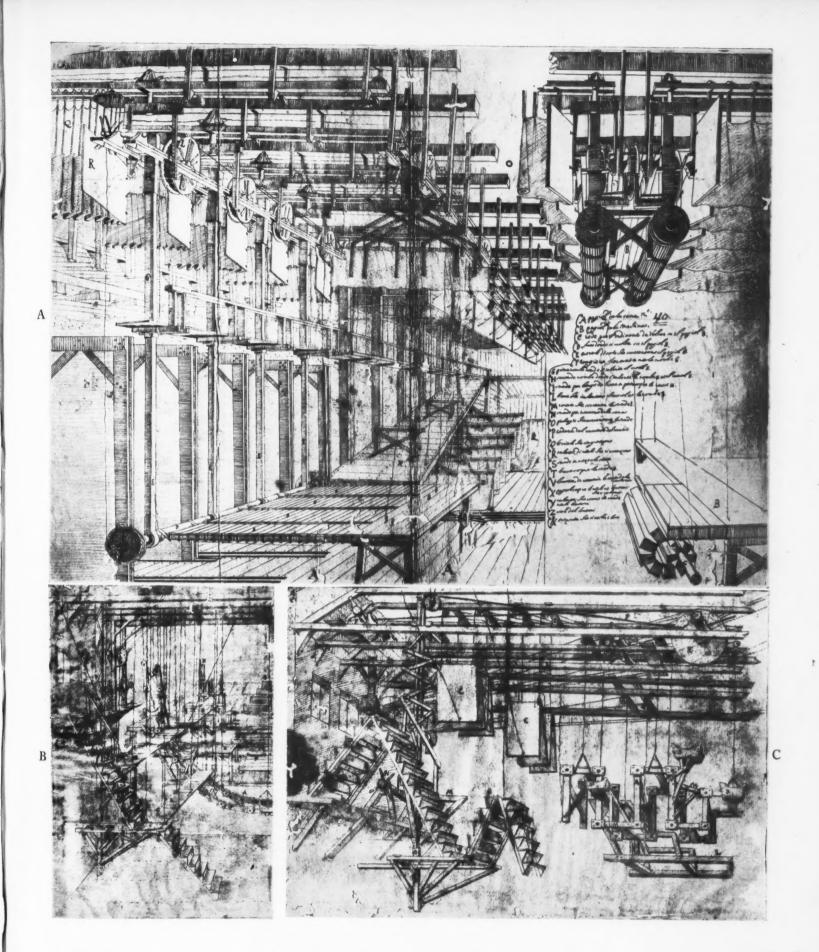


PLATE II. August 1931.

The upper drawing is one of the most interesting in the collection of the Biblioteca Palatina. It shows a windlass beneath the stage which on being turned will, by means of rope, advance simultaneously all the wings protruding above the stage. This device was invented by Giacomo Torelli in Venice, circa 1640-5. The drawing, which is attributed by the author to Gasparo Mauro, 1650, also shows the shape of the walls of the stage. The lower illustration is an engraving illustrating Torelli's device for moving wings still in use at the Theatre du Palais Royal in 1776, and is taken from Diderot's Encyclopædia.

(HO) the and we de



(A) This design shows a most elaborate piece of stage machinery. On the left is a platform for deities to walk upon. On the right, above, is the same platform rolled up, telescoped, and carried up into the flies to make way for the next scene, which is a seascape. In the lower right-hand corner is a detail of the platform rolling up. (B) shows the workings of

a celestial court: a throne at the back, a half-circle of seated gods, and steps and platforms by which people might come and go. (C) is the same scene folded up and telescoped, and raised into the heavens in almost the same way as shown in (A). The designs are attributed by the author to Gasparo Mauro.

The following pages. PLATES IV, V, VI, VII and VIII. THE PROCESS OF HAND PRINTING WALLPAPER.

The sheet and the subsequent four stages of printing which are shown in these plates reveal the considerable amount of that labour goes into the making of a piece of handprinted wallthe paper: photographs here illustrate work in pro-



gress; the bottom illustration is of a block of the hand-printed Leaf and Berry design shown on the plates. The source of the inset wallpaper, and the photographs,

is referred to on page Ixii of this issue.

The following description of the manufacture of hand-printed wallpaper is taken from a Lecture by Mr. H. G. Dowling, the President of the Incorporated Institute of British Decorators:—"In hand printing the block consists of three thicknesses of wood cemented together, the top, or cutting surface, being usually of sycamore or pear tree wood. The outline is 'rubbed down' on the first surface and the design is coloured in with a wash of committee. this fine surface and the design is coloured in with a wash of vermilion. block in this state is handed to the block cutter, who goes over all the outline with tiny gouges and chisels, cutting the outline into the block to the depth of about 3-16ths of an inch. When the whole of the outline has been cut he removes all the superfluous surface of the block, leaving only those portions which were coloured by the tracer. We have now a block with the design standing up in bold relief, but before it can be used to print a superfluous design to be used to be



continuous design it must be provided with metal pins, which mark the top and bottom of the design. These are intended to print on the edge of the paper, which will be trimmed off by the paperhanger. These printed dots are used by the printer to register the repeating of the design. For the purpose of handling the block a short strap is nailed across the back, making a loop just large enough to allow the printer's hand to be inserted. The printing table is still made on the pattern of those used in the earliest days of the craft. Pressure is brought to bear on the block by a 'dolly pole' suspended over the centre of the table. This pole can be brought down by a simple system of levers worked by the foot of the printer. On the table are laid several thicknesses of felt, and over this is drawn the paper to be printed.

"Beside the table stands the colour box. This consists of a box holding a few inches in depth of thick gum, upon which floats a shallow tray measuring about 36 in. by 32 in., the bottom of which is made of waterproof canvas, and on this is laid a square of felt. A lad or girl stands by the colour box to keep the square of felt well brushed over with the size colour used for printing. The printing block is dabbed on this colour, then laid on the paper to be printed, and the needed pressure is applied by the 'dolly pole.' The block is then returned to the colour case and the printed portion of the paper is drawn forward, leaving the next space in position ready for the next impression of the block. The printer follows on the work by fitting the leading printer says on to the one of the first print continuing to report pin or gauge on to the one at the end of the first print, continuing to repeat the design by carefully joining end to end, until the twelve-yard length of the paper has all been passed under the press. If the pattern has two or more colours the process must be repeated for each colour.

"The paper itself is first covered with a ground of colour-this for a few pieces is done by hand on a table twelve yards long, or, if many pieces are required, by a grounding machine. The paper is sometimes embossed after the printing, or as a first process to the plain white paper. This latter way gives a very rich effect when transparent colour is used, as the deeper parts of the embossing take a darker colour. There is no comparison between the

in finish, still less in output, for while the machine can roughly turn out thousands of rolls a day, there are hand - printed designs where skilled princannot exceed one hundred pieces a month.













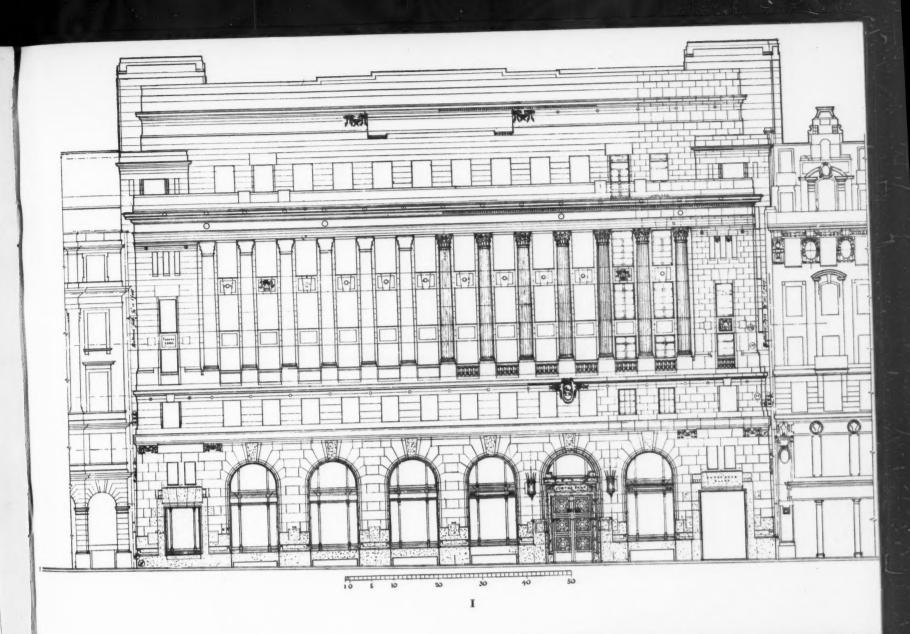








T. L. (2 gr to cool lan Ba





THE NEW HEAD OFFICES OF LLOYDS BANK, CORNHILL, LONDON. (1) A working drawing of the elevation to Cornhill. (2) The Cornhill façade. The walls are built of Portland stone on a granite base and rise sheer from the pavement level to a height of 80 ft. to the top of the main cornice, which crowns the range of Corinthian columns. These columns are surmounted on a podium or base, pierced by large semicircular headed windows with bronze infilling, expressing the Banking Hall (3) and (4) which forms the heart of the building. The architects were Sir John Burnet and Partners in association with Campbell Jones, Sons and Smithers.

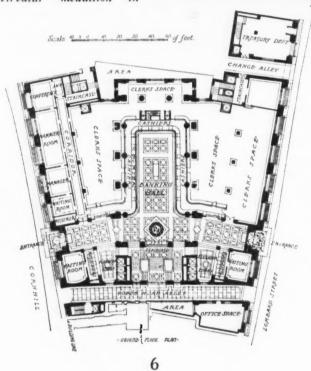


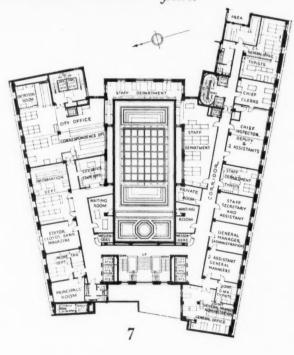


(3) The Banking Hall looking east from the main staircase. (4) Looking west towards the main staircase. The banking hall is approached by large entrances from both Cornhill and Lombard Street. It is flanked on all sides by columns of monolithic Botticino marble. In the rubber floor, at the west end, there is a large circular medallion in

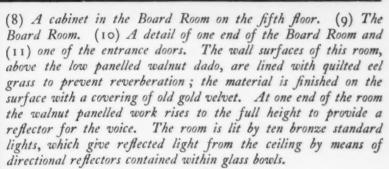


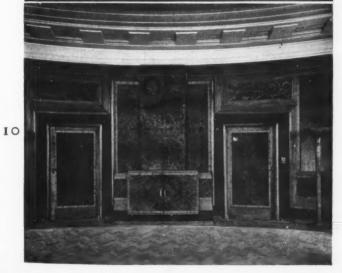
bronze-coloured mosaic, by Gilbert Bayes, of the Bank's sign which is called the Dark Horse. (5) The General Office in the basement known as the Sunlight Room; an original feature of the building because of its ceiling and window lights which are of artificial daylight glass. (6) and (7) Plans of the ground and first floors.









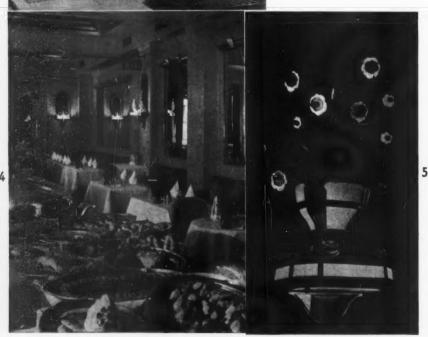


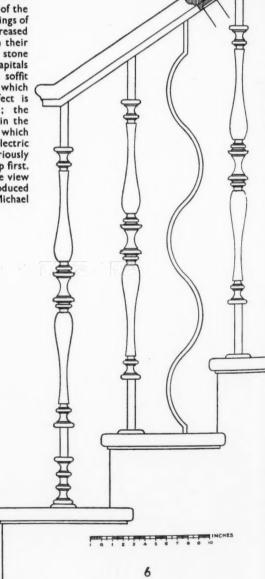


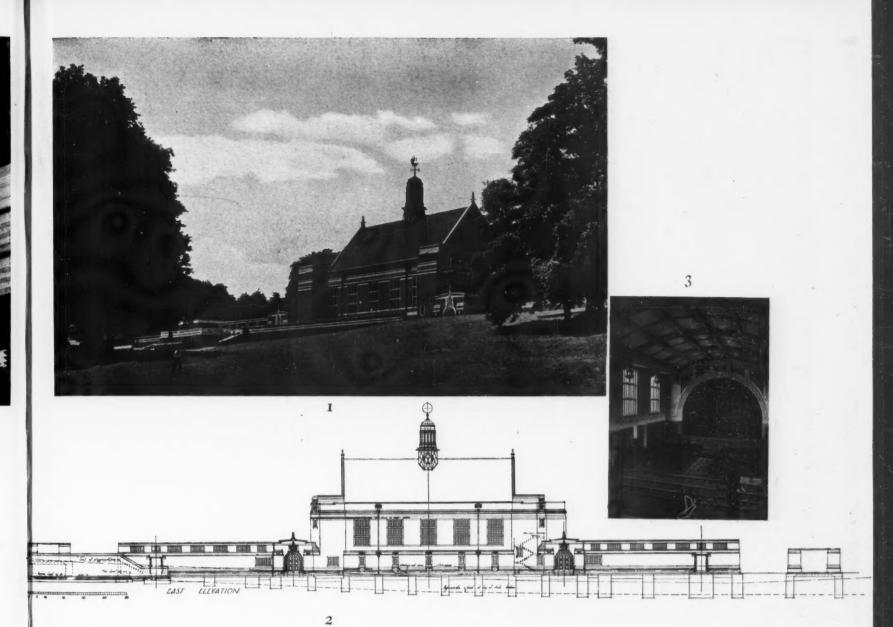


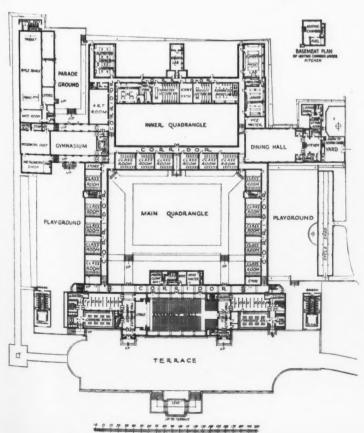


THE MALMAISON RESTAURANT, STRATTON STREET, LONDON. (1) and (2) Night and day views of the canopy and windows to Stratton Street. The glass surroundings of the entrance door form a lighted frame, an effect which is increased by the reflections from the pink mirrors of the soffit with their lighted frames. Separating this frame from the Portland stone of the elevation are two pilasters in Greek Cippolino, the capitals being in bronze. (3) A detail of the lighted frame, the soffit and the capital. (4) Part of the restaurant, the walls of which are warm yellow in colour. The ordinary lighting effect is obtained from glass electric fittings giving amber light; the electric fittings for the coloured lighting scheme are set in the window-sills and in troughs over the mirrors, from both of which light is reflected downwards by the silver ceiling. (5) Electric fittings in the foyer. The flowers are formed of pieces of variously coloured glass, and the light emanates so that they are lit up first. (6) A working drawing of a detail of the staircase. A large view of the staircase and another working drawing of it are reproduced on page 49. The architect for the restaurant was Michael Rosenauer.

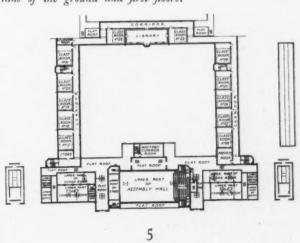


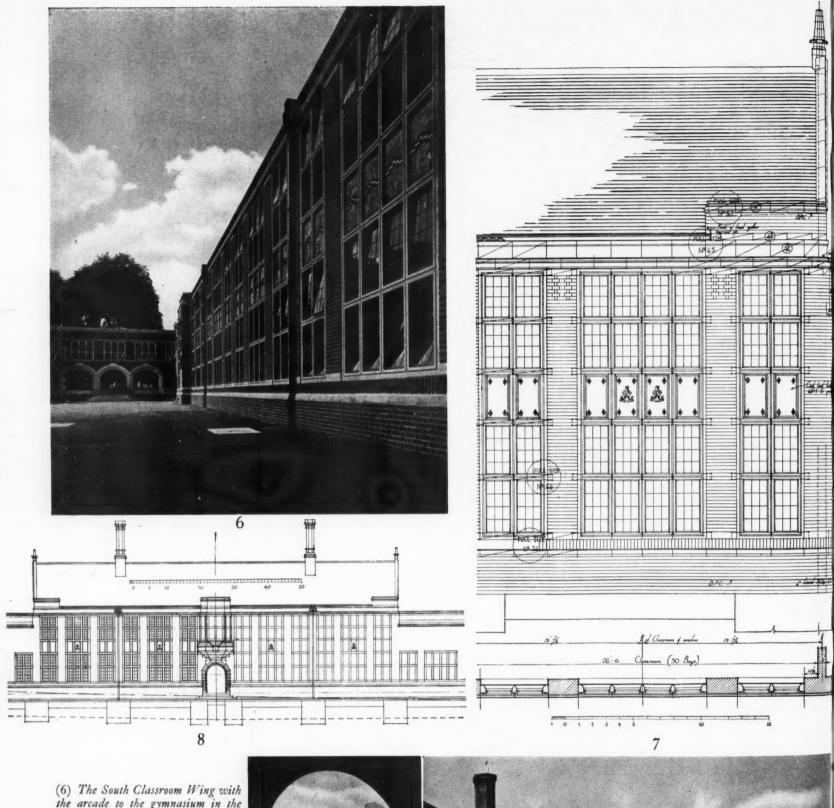






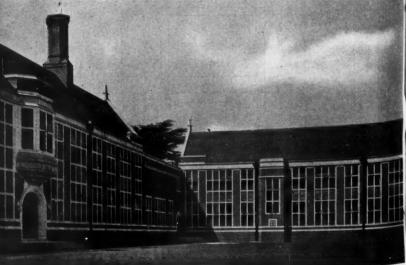
NEW WHITGIFT GRAMMAR SCHOOL, SOUTH CROYDON, LONDON. Leathart and Granger, Architects.
(1) The Main East Front from the cricket field. The terrace walls and steps ar part of a future scheme to connect the building by a ceremonial approach road from the Brighton Road.
(2) A working drawing of the Main East Front facing the terrace, showing the great hall, entrances, etc. (3) The Great Hall from the public gallery looking towards the stage. (4) and (5) Plans of the ground and first floors.

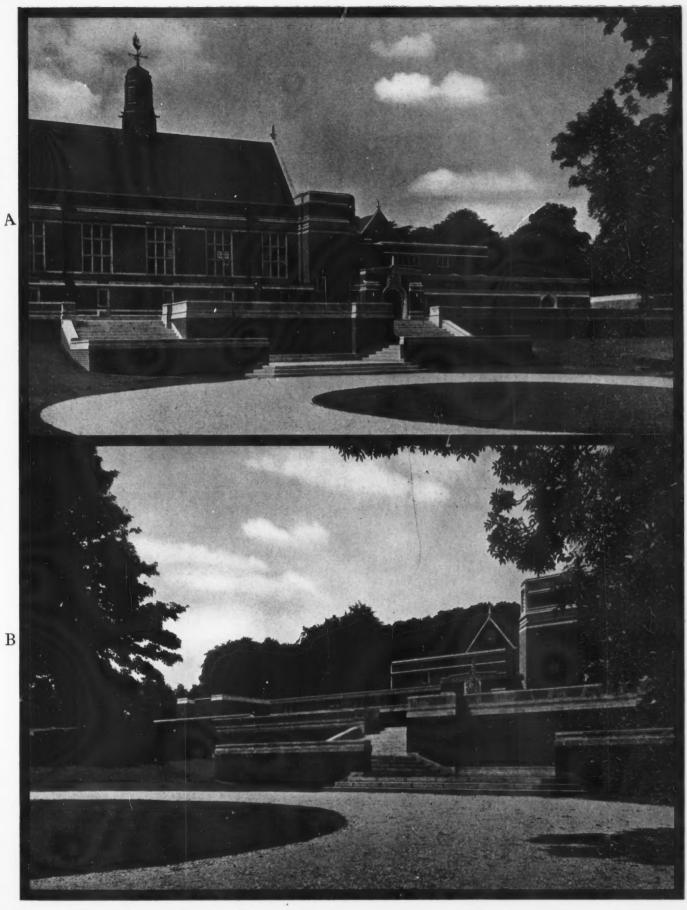




(6) The South Classroom Wing with the arcade to the gymnasium in the distance. (7) A working drawing of a portion of the Classroom elevation. (8) A working drawing of the East Front to the West Block enclosing the main quadrangle. The central arched opening leads to the inner quadrangle, and has a segmental ribbed vaulted ceiling approach. The oriel window is the central feature of the library on the first floor. (9) Looking across the main quadrangle from the doorway to the main assembly corridor. (10) The main quadrangle showing the junction of the north and west classroom wings.







NEW WHITGIFT GRAMMAR SCHOOL. (A) The Great Hall, Main Entrance, Staircase Tower to the Public Gallery, and beyond, the end of the North Classroom Wing from the lower terrace at the east end. (B) Looking across the terrace steps to the South Changing Room block, and the end of the South Classroom Wing beyond. The school is entirely surrounded with matured ash, elm, oak, beech and cedar

trees, and the site occupies 33 acres. The building itself occupies and encloses $3\frac{1}{2}$ acres of the site. The brickwork is in Flemish bond with red stretchers, and multi-purple headers. The roof is covered with hand-made red colliers' tiles. The fleche is covered with copper and is left untouched to allow the metalwork to oxidize to a verdigris green. The rainwater heads and gutters are in cast lead.

A (Dr. tior age achir the and plan a g school of the same and tive Uffer Tratha at the sup doo immore than the sup doo immore the sup doo immore

PL.

山



A GREAT GERMAN ARCHITECT.

Dr. Fritz Schumacher's world-wide reputation as the foremost school-architect of our age is based on solid and unspectacular achievements. As Director of Building to the City-State of Hamburg with its million-and-a-quarter inhabitants, he has had to plan vast housing schemes, and to design a great number of important municipal schools embodying widely different pedagogic and structural requirements. Each of the latter, though uniformly successful in creating an individual scholastic atmosphere of its own, is characterized by the same cheerfulness, ordered spaciousness and masterly fenestration, combined with an almost irreducible minimum of decorative treatment. The gymnasium of his Ufer-Strasse Professional and Commercial Training College is as well known as that of Otto Haeseler's Elementary School at Celle, and in certain respects technically superior to it. Schumacher's circular Ohlsdorf Crematorium Chapel is one of the most Impressive in Europe. An ardent socio-

impressive in Europe. An ardent sociologist, he has given tangible expression to his ideas on prison reform in two penitentiaries that are models of their kind. He is now engaged on a large self-contained Borstal settlement which is being constructed on a reclaimed island that was, till lately, a sandbank presenting considerable danger to navigation in the main channel of the Elbe. Schumacher's discreet and sanely-balanced modernism is the logical outcome of solving his problems in the simplest, most straightforward, and economical manner. Though he uses concrete freely for subsidiary purposes, he always designs in the hard, finely-mottled, purple-red Lüneburger brick, which, besides being the traditional, is stillthe cheapest building material in North-West Germany. His notable earlier work in laying out the new city parks in Dresden, where he was for many years chief architect, has now culminated in Hamburg's very extensive and beautiful "Stadtpark," which is rightly considered to be one of the outstanding exemplars of modern landscape architecture. The illustrations of Schumacher's work on this plate are (1) Langenfort Elementary School, Hamburg. (2) Glasmoor Prison. (3) The staircase bay of the Elementary School, Wendin-Strasse, Hamburg.



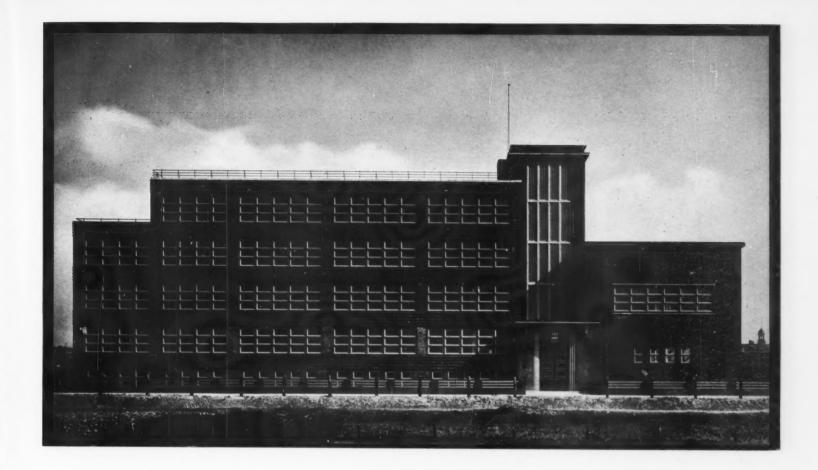


PLATE X. August 1931.

OF JAIR

3

C S of the State o

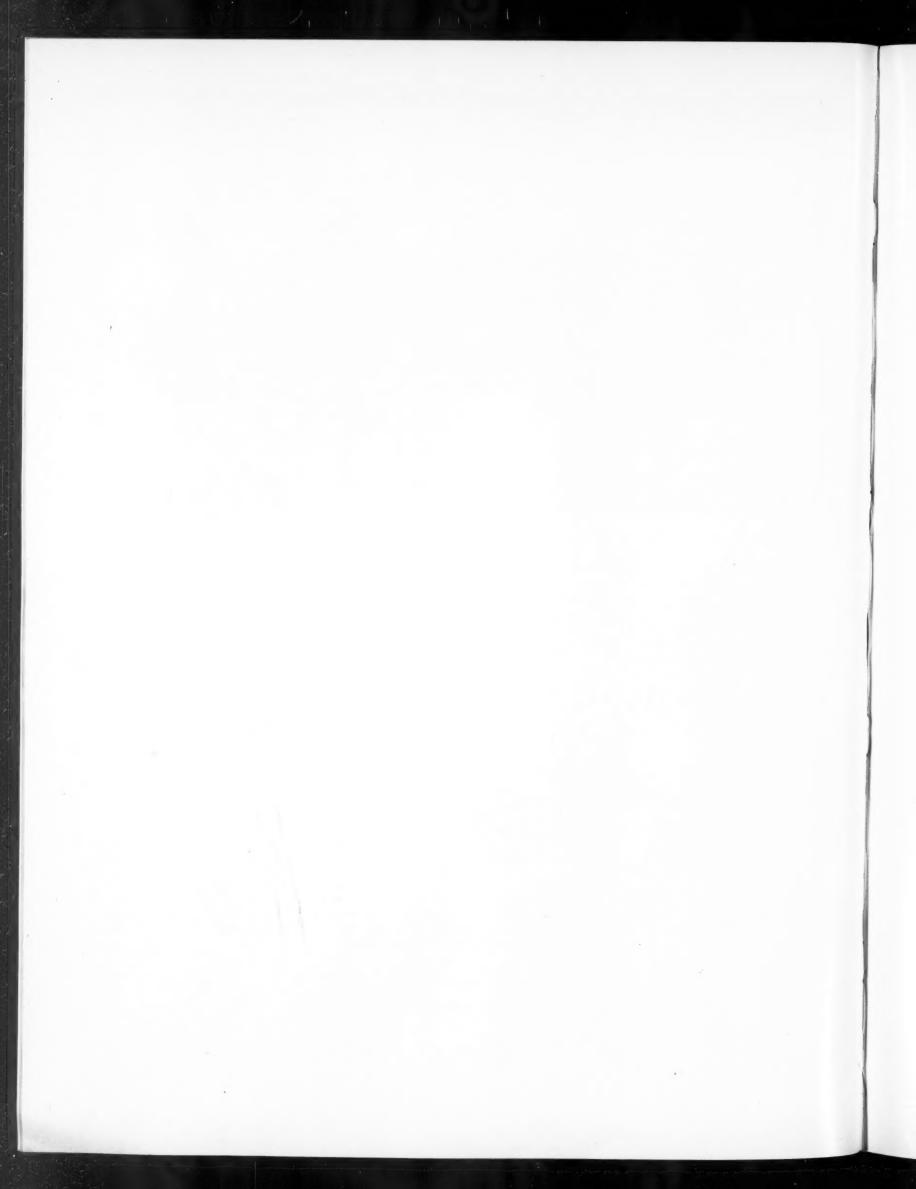


CUXHAVEN HIGH SCHOOL, GERMANY. Dr. Fritz Schumacher, Architect. An asymmetrical composition based on a very few elements which are in themselves reduced to their simplest possible terms. As in many of Dr. Schumacher's schools, the staircases and landings are grouped together in a dominant tower-like structure, faced with standard unit-panes of glazing that help to enhance vertical emphasis. The imposts of the main entrance doorway are daringly, but with surprisingly successful results, placed slightly out of axis to the intermediate mullions of this longitudinal window; while the patterned string-courses between the almost unbroken bands of schoolroom assements are lapped over on to the near side of the brickwork

surrounding the concrete window-frame. By these means the adjoining gymnasium is brought into closer and more coherent relation with the main body of the building. The otherwise overwhelming length of the latter, and the strong horizontal rhythm of the schoolroom windows, are modified and, as it were, readjusted by making the end bay one floor lower than the other four. The criticism that "a school ought not to look like a factory" (by which is usually meant plain and forthright) can be met by pointing out that an abundance of light and of space are prerequisites of both—and, indeed, their only essentials—and that a school is supposed to be a factory of intelligence.

FLATE XI. August 1931.

[P. MORTON SHAND.]



THE BOOK OF THE MONTH.

J

Twelve Modern Architects.

By Joseph Thorp.

Representative British Architects of the Present Day. By C. H. Reilly, O.B.E., M.A., F.R.I.B.A. London: B. T. Batsford, Ltd. Price 7s. 6d, net.

HIS is a very attractive little book and I hope a precedent for others of the same kind from the same competent and kindly hand, and from others. The personalities, and the work of Painters, Poets and Novelists and, less frequently, Musicians are presented to the public in articles, monographs and anthologies. Of that type of artist that we call Architect we know little enough in general, though Sir Edwin Lutyens, it is true, found an eager and instructed herald and interpreter in the late Sir Laurence Weaver. It is important that the honourable labours of the Architecture Club should be thus supplemented. Architecture is the basic art. To architects we must look to prevent the threatened degradation of the shell of our civilization, the houses and the groups of houses called towns and cities in which we live. And it is important that laymen, individual patrons or patrons in committee, shall be sufficiently instructed to allow and encourage them to do so. A first step to public interest in architecture is a public interest in architects. And these friendly studies by Professor Reilly, writing with intimate knowledge of his subject and subjects and mostly with affection, carrying his wide learning lightly, and using an idiom not too technical to be understanded of the people, are an example of how the business can and should be done.

Professor Reilly's twelve sitters, tactfully presented in alphabetical order to avoid sundry awkwardnesses, are Professor Adshead, Mr. Robert Atkinson, Sir Herbert Baker, Sir Reginald Blomfield, Mr. Arthur Davis, Mr. Guy Dawber, Mr. Clough Williams-Ellis, Mr. Curtis Green, Mr. Lanchester, Sir Edwin Lutyens, Sir Giles Gilbert Scott, and Mr. Walter

In general, the author's method is to indicate the causes, hereditary, educational or temperamental, of his subjects' bias towards the profession; to note the method of their training; to give an impression of the character and personality—on which the uniformly excellent portraits contribute their commentary; to record the turning points and triumphs of their career, and to add a few salient examples of their work.

Here, perhaps, we can find a flaw in presentation. The

scale of the reproductions is much too small. One appreciates the publishers' dilemma. A larger page means increased costs. But I think it would have been better, seeing that half-tone reproductions never satisfactorily balance the facing pages of text in weight or colour, even if, as rarely happens, they are of a suitable shape, to ignore traditional practice and frankly make the illustrations fill almost the whole of the pages on which they appear. In many instances this would have given us pictures of three to four times the superficial area.

Professor Reilly, writing primarily for the layman, though, no doubt, saying much to interest and instruct the members of his profession, particularly the younger men, may be glad to know that this layman found the wide gaps in his own knowledge of these most important citizens and their work, appreciably and most flatteringly filled out by this informative little book.

The author has a skilled journalist's instinct for the salient detail, an instinct rare in writers writing on their professional subject; while his detailed knowledge and authority enables him to avoid the almost inevitable superficiality and unconvincingness of the omnibus journalist's approach. extends the lay reader's ideas, vocabulary and technical idiom; incidentally he also offers canons of criticism while avoiding, owing to his relation with his subjects, any explicit criticism-a defect which has its compensations. He is obviously immensely interested in the personalities of his sitters—I suppose it would not be quite fair to say more interested in their personalities than in their work. He has, in fact, achieved something like a friendly introduction to these twelve distinguished artists, so that if one met any of them now for the first time, one would meet them almost as fairly well-known acquaintances.

One omission, at least, strikes the reviewer as unwarrantable, that of Mr. Charles Holden. The happy inclusion of Mr. Clough Williams-Ellis to represent the younger men, is justified not merely by his work but by his public-spirited service to the cause of the preservation of our amenities, and the intrinsic interest of his baroque personality. But the creation of the fine building in the Broadway, with its unmannered austerity and its masterly functional detail within, is surely sufficient to make its author representative -representative certainly of adventurous today, if not of traditional yesterday. And as a layman sufficiently instructed to be at least representative of the needs of those for whom this book was presumably written, I should like to have seen a place made for such architects as Edward Maufe, of Easton and Robertson, and of the ingenious, heterodox, and again, I submit, representative, Joseph Emberton. Perhaps when Professor Reilly produces, inevitably, a volume of further studies to carry on a good work for which he, with his unrivalled opportunities as teacher to get into the skin of his subjects' minds and his generous temperament, is better fitted than any we could name, he will find a place for the five architects I have mentioned and also for Messrs. Etchells, Mackintosh, Goodhart Rendel, Richardson, and Voysey. And if, as is likely, he cannot approve of all their works and ways, no harm will be done if a little friendly and informing criticism be interspersed with his encomiums for the benefit of those, of whom this reviewer is a type, with more goodwill than knowledge.

But perhaps our learned Professor will now be murmuring, Why doesn't the fellow stick to his last (if any)?—always a wholesome, if depressing, question.

THE GROWTH OF THE INDIVIDUAL MIND AS SHOWN IN THE HISTORY OF PATTERN.

Pattern should be architecture—mass, proportion and colour—in miniature. It is architecture confined to a limited space. Ratio pulchri consistit in resplendentia formae super partes materiae proportionatas (Dionysius the Areopagite).

A history of pattern in Europe from 1180 until 1900 will be a history of civilization. "The centres of intellectual thought are the centres of decorative creation, and it is their influence that spreads over those at a lower stage of development." according to Miss Evans.

lower stage of development," according to Miss Evans.

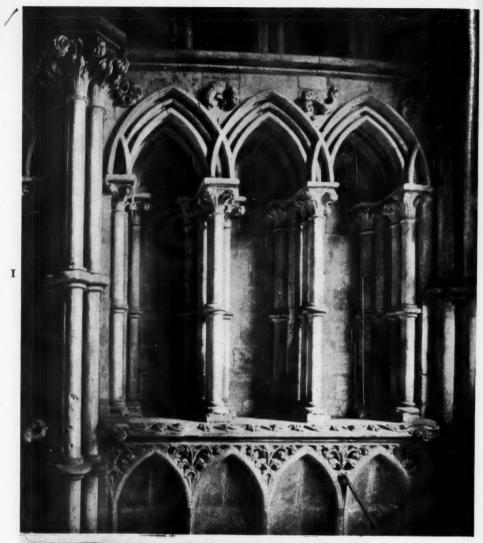
In 1180 Europe was "Christendom," national feeling was less strong than religious, and art expressed itself in sacred subjects. England and France were the most considerable church builders, and style varied as little as the outlook of the two countries. Pattern was the product of a group consciousness. Individual elaborations hardly occurred to the builders. A multiplicity of purely structural forms placed on a plain surface (1) was the most elaborate device to which they resorted. Some individual craftsman might express the contemporary view of botany or legend (2) in the foliage of a capital or of a crocket, but no vital change in the basic form of the pattern was attempted.

The reasoned Catholicism that preceded the Reformation, when doubt was beginning to assail the Church, was expressed in the severe well-proportioned lines of English Perpendicular architecture. That the mind of Europe was becoming national and that the sense of "Christendom" had departed, is evident enough in the distinct disparity of styles at this time in England and France. There was no "Perpendicular" in France-Gothic architecture became as "flamboyant" and as elaborate as the ritual with which Holy Church in that country was attempting to counterblast Protestantism. Yet architecture and pattern still remained largely sacred, and the growth of reasoning which marks the break-up of the group stage of civilization appears in the definite attempt to evolve a pattern that was not a mere imitation of structural forms (3). The invention of fan-tracery at this period-a decoration that has nothing to do with the vaulting of a building-is a supreme instance of this attempt to reason and develop.

The sixteenth century stands for the complete breakup of Europe into separate nations, with Italy as the fountain-head of intellectual waters. Pattern therefore becomes the work of small groups—but still groups whose rugged scholarship is based on the discovery of Latin and, later, of Greek remains—and makes itself felt in art by means of decorative detail. Gothic forms were plastered with "classical" designs, and all over Europe there were styles corresponding to the English Jacobean.

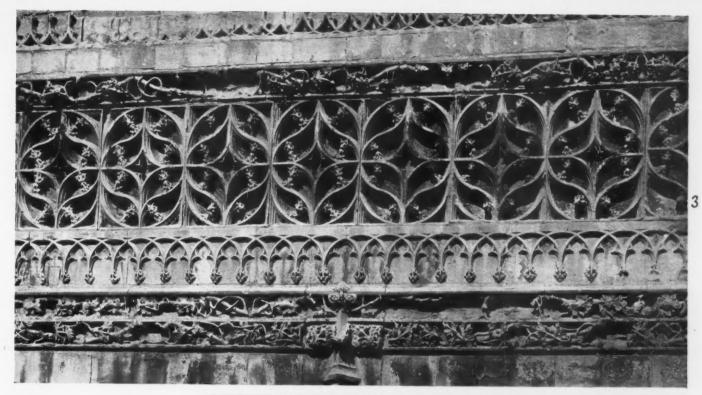
The small groups of classical scholars, as ignorance of their material decreased, split up into individuals, and the seventeenth century produced great individual architects. Thenceforward the individual set the fashion to the nation, not the nation to the individual. The Baroque movement is not as indistinguishably elaborate as would first appear. In England many persons regard it as sacrilege to refer to the greatly differing Queen Anne architects as Baroque.

The cultured and somewhat patronizing study of the "East," which was at first a literary movement in the eighteenth century, appears in the panels of a dressing-room in the Château de Champs, well guarded on either





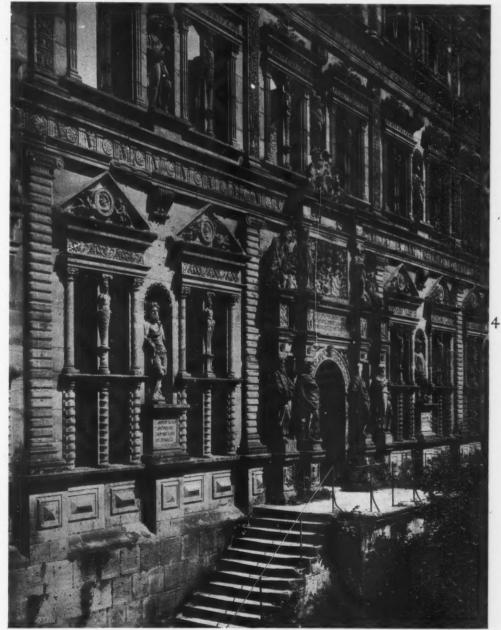
(1) A DETAIL OF THE NORTH PORCH, WELLS CATHEDRAL, built about 1185, and showing that elementary Gothic pattern consisted of multiplicity of structural forms. It differed little over the country. (2) A PAGE ILLUMINATED WITH BOTANICAL SUBJECTS, by Cybo of Hyères, about 1390. This is an example of the medieval individualist expressing himself in detail only, since buildings were in standardized forms. (3) A DETAIL OF THE BALUSTRADE, ST. GILLES, CAEN, made about 1485. This is the nearest approach in France to English Perpenicular. It shows the rasoned development from a multiplicity of stuctural forms into a lefinite pattern form. (4) THE FAÇADE OF THE OTTO HEINI CHSBAU CASTL. OF HEIDELBURG, begun in 1556. The beginning of Classical learning consisted of the mere plastering on of Roman architectural details, as did Jacobean in England.



side by smaller European devices (5).

devices (5).
The "Romantic" plaster Gothic, another development, appears in its crude stage-when it was an eighteenth-century converse of "Jacobean "-on the wallpaper design for the Toile de Jouy (7). nineteenth century marked the complete split up of the more "civilized" nations in Europe into a collection of rival individuals fiercely In England competing. architecture became connected with names, not styles—names whose works the more sophisticated find little difficulty in disentangling. Patterns were made by machine to order; they increased in variety, if not in beauty, a thousandfold. We find Butterfield, Lewis F. Day, Ruskin, and the various commercial hacks who were skilled in "freehand drawing," occasionally relieved by Burne-Jones, Rossetti, and William Morris.

The mental reaction from the nineteenth century is shown nowhere more clearly than in decorative art. Art Nouveau (6), which was "back to nature" with a vengeance, developed into a simplicity of manner that







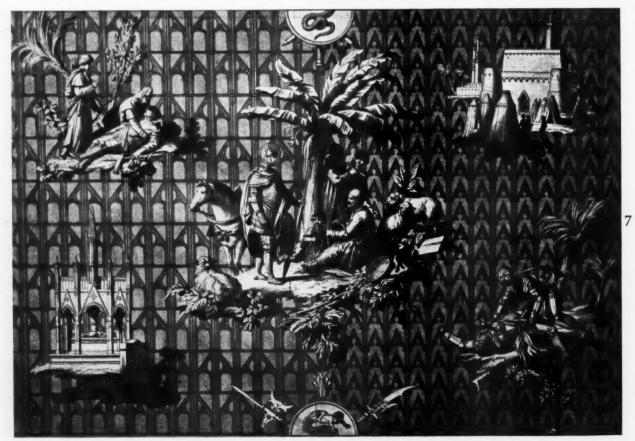
(5) A PANEL FROM A DRESSING-ROOM IN CHÂTEAU DE CHAMPS, c. 1730. An example of fashionable Oriental scholarship. (6) A DINING-ROOM CHIFFONIER, DESIGN OF TRAVELLER'S JOY, by Galle, 1900. An "art nouveau" example of the reaction from revivals and the beginnings of our present age of theory. (7) A DESIGN FOR TOILE DE JOUY, c. 1817. A decorative expression of literary Romanticism.



dispensed with decoration as an applied detail. Decoration thenceforward became a well-proportioned coloured building itself—the symbol of the socialistic architecture which is fighting the more elaborate and scholarly architecture of capitalism today.

architecture of capitalism today.

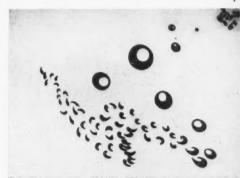
Pattern. A Study of Ornament in Western Europe, 1180-1900. By Joan Evans, B.Litt. (Oxon), D.Lit. (Lond.). In two volumes. Oxford: At the Clarendon Press (Humphrey Milford). Price £7 7s. net.



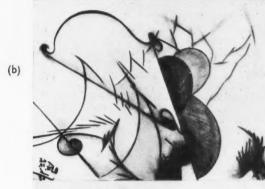
(a)

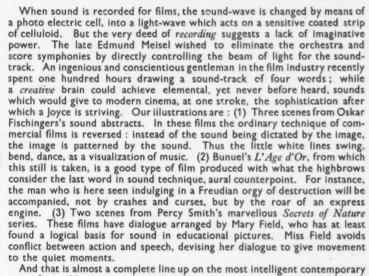
(c)

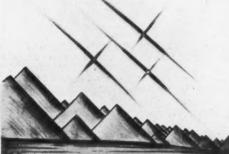
FILM INQUIRY—31. SOUND.











uses of sound!

OSWELL BLAKESTON.

¹The previous articles were published in the June and July issues.



A Free Commentary.

By Junius.

CCASIONALLY some intelligent citizen ups and says, at a conference or what not, in contrast to the general run of smooth platitude and compliment and general Micawberism, something fit to paint and frame up over one's mantelshelf, to broadcast in any way available to one.

Let me then quote Mr. F. Bowes, joint Hon. Secretary of the British Council for the Welfare of the Mercantile Marine:—

"Were any other race," says Mr. Bowes (irrelevantly it would appear—and we can see the chairman getting restless—but sanely and to the point): "Were any other race, miraculously substituted for our people, to attempt to carry on the government of the United Kingdom as it stands, with all its political and local institutions—including, for instance, its 188 separate police forces in England and Wales alone, the result would be complete chaos within 48 hours.

local institutions—including, for instance, its 188 separate police forces in England and Wales alone, the result would be complete chaos within 48 hours.

"We, ourselves, by the exercise of a marvellous self-control, and the practice of the enervating principle of compromise, managed to carry on, in spite of the self-created impediments, but the result was largely to nullify such efficiency and

superiority as we possess.

"It might be said that, on our general principle of muddling through, we preferred to let abuses grow till they became a scandal sufficiently flagrant to rouse public opinion to uproot them. But though this might be politically sound, it was certainly economically and administratively unsound."

It isn't only Russia that needs a five-year plan. But most of our plans are five-day plans—traffic control to take a signal instance. And nobody seems to remember the late Sir Laurence Gomme's work on the magnificent (in scale) and pestiferously wasteful (in effect) muddle of the government of London.

Muddling through was a possible, if never an intrinsically sound policy for a nation that proudly led the world in enterprise and wealth. It is not a possible policy for a nation with diminished resources and clamorous problems and the sooner we recognize this in little things, as in the big, the better for us.

I never can forbear to bring in King Charles's head. I think it would be a real step, a gesture rather, perhaps, if the London streets were properly labelled and numbered. That at any rate is not an insoluble probiem, but nobody has bothered to solve it. And the spectacle of it unsolved stands for a symbol and sign of much that is wrong with us.

The British Institute of Industrial Art has produced an admirable little book: The Art of Lettering and its uses in divers crafts and trades. It is published by the Oxford University Press at a price (3s. 6d.) which, as the phrase goes, "brings it within the reach of all." It is well illustrated and the plan of the book is highly intelligent and practical. It discusses stonecut lettering, sign-writing lettering, applied lettering (taking the place of fascia-boards), engraved lettering on metal, and each subject is treated uniformly with a brief but informative note on "some technical consideration," followed by a description of trade practice.

I do not hesitate to say with deliberation what is often said lightly, that there is no business firm, and no town clerk, that can afford to be without this little book. It is eminently sane, it does not press any "art nonsense" upon the man of business or affairs. It stands for orderly, legible, technically apt lettering which respects the business man's problem—a problem which is also often that of the government department—and regularly that of the administrative bodies throughout the country. Certainly some patriot should present a dozen copies to Mr. Herbert Morrison and his officials—this patriot is too impoverished as these notes leave him at present.

If the A.A. and the R.A.C., to take two mournful offenders in this matter, had had this counsel at hand and someone on their governing bodies interested and instructed enough to follow it, we should have been spared much blundering unsightliness.

I would beg the B.I.A.A., when the inevitable second (and we hope third and fourth) editions go to press, to take their courage in their hands and create a precedent by adding an appendix with the names and addresses of individual master-craftsmen in the branches of letter-making concerned.

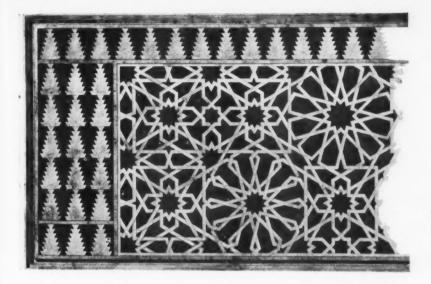
If the B.I.A.A. would take counsel with the R.I.B.A and plan a treatise necessarily more complex but similar in general intention, on the problems of the building trade, some brief survey of traditional and modern methods of construction, some notes on the relation of material to environment, some general principles and considerations for those citizens, private or official, who are intending to build, they would perform a great service in accordance with the direction and principles of their charter, I hope it is not too ungracious to suggest that the B.I.A.A. has some leeway to make up.

The following letter may be of interest.

"Dear Junius—You seem interested in efficiency. Perhaps you might care to make a comment on this. I recently spent a night in a well-equipped London hotel. My bedroom was near the lift, which screamed every time it passed. The rubber fenders of the wooden handles of the window cords had perished and they rattled like castanets on the window when an otherwise welcome breeze blew. One of the two blinds only came down three-fourths of the way and the curtains only stretched halfway across the window thus allowing a beam from a search-light (apparently) on the other side of the wall of the building, to strike full in my eyes. . . . This light was put out when the dawn came, which continued the bad work. . . . Why can't hotel keepers realize that bedrooms are meant to sleep in?"

This really needs no comment. Yet no doubt there were several Field-Marshals in full uniform in the gilded hall of this caravanserai—which is, in fact, not sufficient compensation.

Apropos sleep and hotel bedrooms, between which my ingenuous correspondent thinks there should be some connection, I recently stayed in a hygienic hotel on which there was not even a strip of drugget in the bedroom corridors. The hotel guests clattered to their rooms along the bare polished boards. It didn't seem to have occurred to the management that sleep was a part of Hygiene. And yet people wonder why the "Come to Britain" movement is not more successful!

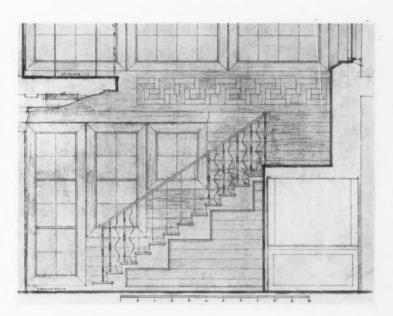


A drawing of the bronze EXTERIOR GRILLES to the window parapets at the Malmaison Restaurant, London.

Designer: MICHAEL ROSENAUER
Craftsmen: JAMES GIBBONS

The Architectural Review Supplement
August 1931

Decoration & Craftsmanship



OVERLEAF: AT CLOSE RANGE.

A detail of the panelling in the MAIN FOYER with the beginning of the STAIRCASE LEADING TO THE FIRST FLOOR of the Malmaison Restaurant. The panelling is contained in flat veneer borders of oak, greyed by a french polishing treatment, relieved by panels of different sizes which revea' a display of oak graining, the effect being enhanced by delicate gold bronze lines set in bold moulded frames of oak. These machine-made mouldings supply the need for plastic in the otherwise flat wall, just as, in the old days, this need was satisfied by hand-carved mouldings. The railing is executed in gilded bronze, and the curved, flat balusters make a decorative contrast to the upright balusters, not only in form, but also in their display of reflected light. Above is a working drawing of the panelling and staircase.



Colour in Interior Decoration.

V'.-Colour Reaction.

By John M. Holmes.

HERE are at least two aspects in which colour may be considered. While all colours have ordered or chaotic relationship with one another, as already indicated, it is possible also that individual colours may have a particupsychological effect, and the dominant colour in any scheme may be selected with this end in view. Such expressions as "having the blues" and "seeing red" show fairly common reactions to particular colours. There is a general association of pleasure with Pure (rather than greyed) colours, hence their use in the fair and the theatre and a tendency to desire their use in everyday life, as expressed in a poem by John Drinkwater: " If all the carts were painted gay." No one can estimate the probable effect on Londoners if all buses were painted pale blue instead of red. Attempts have therefore been made to identify particular colour reactions with an immense number of individual tests, as a basis for general conclusions. The comparatively new science of psychological analysis may be able one day to put forward conclusive generalizations, but it is usual for most people to associate different ideas with particular colours at different times and in different circumstances: Red may induce



L. DISCORD.



M. SHARED CONTRAST.

warmth, happiness, courage, on the one hand, but may also suggest strife, aggressiveness and turbulent activity. Yellow may suggest sunshine and induce cheerfulness, but in modern America it is used as a term signifying cowardice, and certain low-toned greenish yellows are certainly depressing when associated with many other colours. Much was heard after the war of the use of yellow in interiors where men suffering from "shell shock" were treated. In this respect it is clear that yellow is the most luminous of all pure colours (i.e. lightest in tone), and therefore in a dull climate is least gloomy, quite apart from its colour.

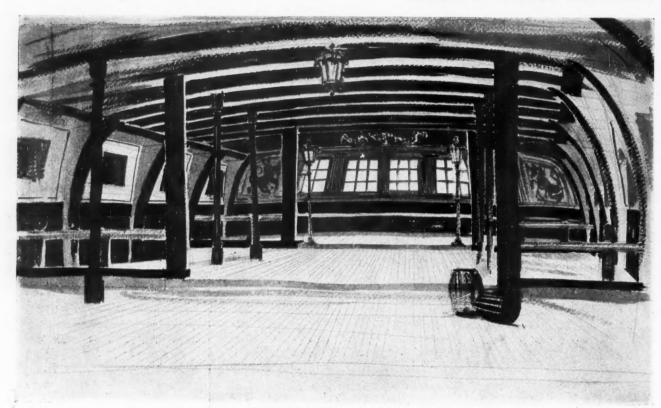
Blue may symbolize spirituality and coldness, but may also suggest depression. Purple may induce a sensation of rich solemnity. It is the Roman Tyrian dye.

It may be that effects which are physiological rather than psychological are the result of particular wave lengths of light, irrespective of the colour reactions in the retina, but in most cases the matter seems to be one of subconscious association with previous experience, and in any case remains hypothetical and dependent upon the individual.

The colourist is on much safer ground in studying relative Tone and degree of

Purity in colours, for it may be demonstrated that the choice of colours in this respect exercises a profound effect upon the mind.

 $^{^1{\}rm The}$ previous articles were published in the April,~May,~June and July issues of THE ARCHITECTURAL REVIEW.



N. A design for a RESTAURANT at Brighton, by Robert Atkinson.

The accompanying illustrations¹ are chosen to show the result of sophisticated tone-adjustment as compared with the more simple use of colours of Primary Purity for different purposes of expression.

This is the more interesting as in three widely different subjects—a painting, a textile, and an interior—the colour-schemes are all based on similar colour relationship.

In the highly sophisticated colour scheme of the first example (L) the painter has chosen to treat the dress, stool, and the features of the figure, with the trees and flowers, in more or less realistic colours, mostly of Primary Tone and Purity. The red is found at C in Diagram 1,2 and it has for its contrast the blue of the stool with blue-green on the shoes of the figure, forming a harmony with blue. These colours are as they would appear in normal light if of Primary Purity. By the introduction of two discord colours, the lighttoned crimson of the background and the low-toned vellow-green of the foreground, colour incongruity is introduced, and because of this the figure seems to exist in a strange and incongruous world. A scene which is quite ordinary is thus removed into an atmosphere of poetic imagination, or at least of theatrical convention, and conveys to the mind by the use of colours in a particular relationship, the subjective intention of the artist.

In the next example (M), similar colours, i.e. blue

Illustrations L and M are reproduced by courtesy of the British Museum and the Victoria and Albert Museum respectively.

THE ARCHITECTURAL REVIEW, April 1931.

sharing yellow, orange-red, and crimson as a contrast, with blue occupying the largest areas; the colours are used in Primary Purity and Tone, with the exception of the crimson, which is used in small areas only as a light-toned discord. The general effect is that of ingenuousness and simple colour brilliance. The figure more successfully represents Mercury, however, rather than any objective child, partly because of the symbolic staff held by the child and the conventional shapes of the design, but also because of the introduction of an incongruous colour, i.e. the light-toned crimson, which adds a touch of unreality to the design.

Reference to Diagram I (x) will show blue contrasted with red, and yellow-orange and orange adjacent to red, and therefore forming a harmony with it.

In the third example (N), a design by Mr. Robert Atkinson, the psychological effect produced by the use of colours of Primary Purity and Tone without incongruity, serves to enhance the boldness of the forms. It is an example of a colour scheme which further emphasizes the architect's intention, and is at one with the design as a whole, and with its acceptance of the frank wooden construction of ships as a means of decorative expression.

The colour relationship is similar to that used in the two previous schemes; blue being used as a contrast with two opposite and adjacent colours, orange and red. They are put down boldly in simple Purity without mixture with other colours and without discords.

(To be continued.)

ARCHITECTURE ON WINGS



An opportunity seldom occurs for the expression of aeroplane shapes in terms of architecture; in the new shop for National Flying Services in Trafalgar Square, London, the architect, Raymond McGrath, has accepted his chance. The illustrations are (1) A night view of shop front. (3) A modern Temple of the Winds, the aluminium display group in the shop window, of which (2) is an isometric perspective sketch. This group is spotlighted at night. (4) The



interior; the wing-shaped counter is made of laminated wood and walnut-veneered, and is supported on aeroplane struts. The ceiling is coved along one side to spread the light from the wing-shaped lighting shelf to the opposite wall. The walls and ceiling are lemon yellow, with which is used black, dark emerald, and brick red. The design on the linoleum floor suggests the curves of fields and rivers as seen from the air. (5) The plan and interior elevations of the shop.



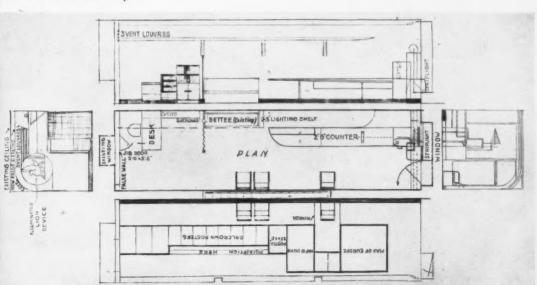
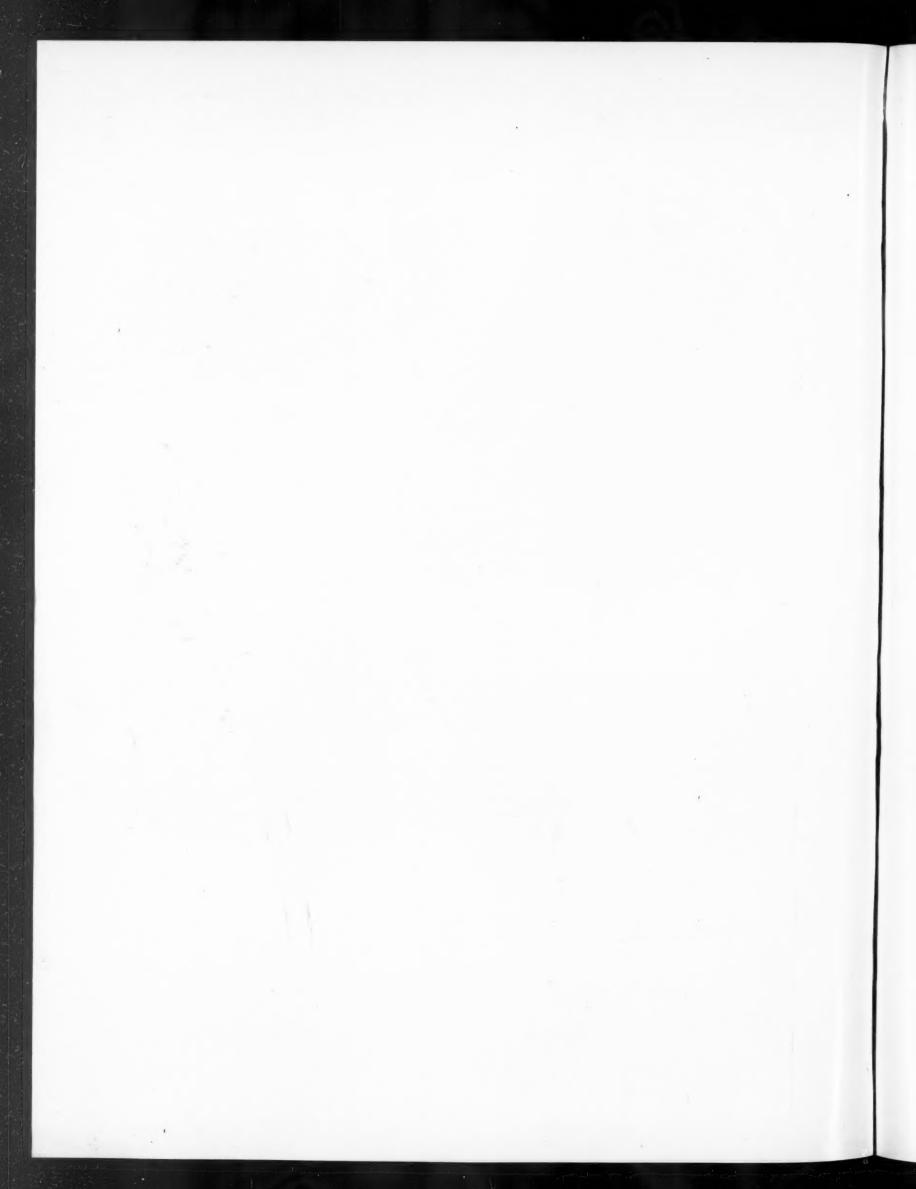


PLATE XII. August 1931.



5









We are indebted for all the illustrations on these pages, except (3) and (5), to Mr. Kineton Parkes, whose new book, The Art of Carved Sculpture, was recently published by Messrs. Chapman & Hall, (21s. net). Referring in his introduction to the figure, the author says, "Nature requires to be conventionalized into ornament. This is not to say that there cannot be design in a figure treated entirely realistically: there can, there must be, for design is rhythm, and no great piece of sculpture exists in which rhythm is not perfected; no great sculptor ever existed who was insensible to design. It is the design of pure form, however, and not of ornament; the rhythm of life which accords grace to all true and beautiful sculptural work. There is no graceless great sculpture; no great sculpture that is not natural, no spontaneous outburst of sculptural lyricism that is not full of this kind of design." (1) YOUNG THINGS. A group from the Museum of Modern Art, Barcelona. Sculptor: JAUME OTERO. (2) THE WATER CARRIERS. Sculptor: PAU GARGALLO. (3) CARYATID FIGURES. Sculptor: GILBERT LEDWARD.



(4) TORSO. Sculptor: FRANK DOBSON. (5) MANKIND. Sculptor: ERIC GILL. (6) VOLUPTÉ. Sculptor: MARCEL BOURAINE.







(7) YOUNG WOMAN. Sculptor: José Clará. (8) PSYCHE. Sculptor: ALFRED TURNER. (9) POMONA. Sculptor: José Duñach.



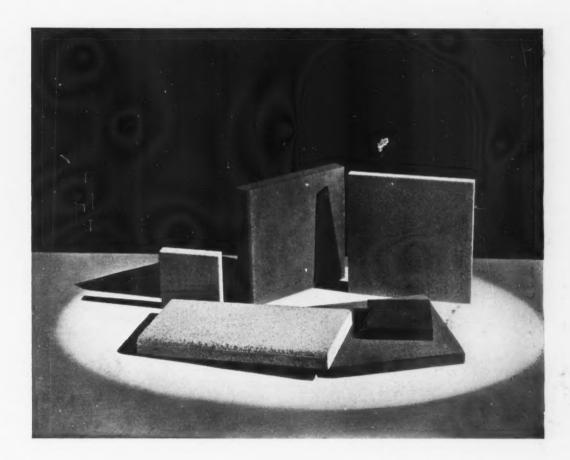




54

RE.

(8) ONA.

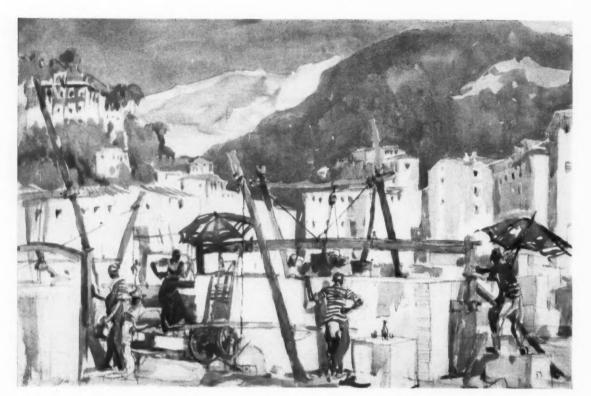


Stairways, up and down which crowds move hurriedly, are danger spots—unless the stair treads and nosing are so constructed that the feet of the rushing throng cannot slip on the stair steps. "Alundum" stair tile is permanently non-slip—wet or dry. "Alundum" tile is exceptionally resistant to wear, whatever the volume of traffic. The hardness and toughness of "Alundum" abrasive and the Norton method of manufacture give a tile that has no counterpart. "Alundum" is truly a unique production. It is literally, indisputably, in a class by itself. Its wide adoption, increasing by leaps and bounds as its non-slipping characteristics are fully realized, hastens the day when a dangerous, accident-inviting stair or floor will rarely be seen in a modern public building. Write to us for "Alundum Stair and Floor Tile" and we will send with it various publications illustrating "Alundum" tile and "Alundum" aggregates applied to every slipping hazard—for a slipping hazard exists wherever people walk.

Regent House, Regent Street, London, W.I.

The adamite Co. Lta.

Marble



From a watercolour by F. Brangwyn, R.A.

WS

J.C.Ihitehead & Sons Ltd Marble Experts, Imperial Clorks Kennington Oval, London, S.E.I



ANTHOLOGY.

Eupalinos, by Paul Valéry.

INCE M. Paul Valéry was elected to the French Academy in 1926 as successor to Anatole France—a genius of a very different type—the remarkable quality of his work has come to be widely recognized in Europe and America. The honorary degree conferred by the University of Oxford at the Encænia of June 24 of the present year is the latest indication of his importance in the world of art and letters.

The problems of architecture have always haunted Valéry, since he first raised some of them in his famous Introduction à la méthode de Léonard de Vinci as far back as 1894. In his post-war dialogue, Eupalinos ou l'Architecte, composed at the request of the French review Architectures, he has brought together in a singularly attractive form his reflections, which are the outcome of constant contact with craftsmen and of much quiet meditation: it may be recalled that he kept silence as a man of letters for twenty years, and—a friend of the famous mathematician, Henri Poincaré—gave himself to the study of the exact sciences and of techniques in all demains.

No special familiarity with antiquity is required for the full appreciation of *Eupalinos*; and readers of Plato's *Phaedrus* will understand why Valéry should have chosen the dialogue-form in particular, for presenting his ideas on architecture and general æsthetic. Here Socrates and Phaedrus meet, not as in Plato on the banks of the Ilissus, but in the underworld—and it is in that unsubstantial realm that Phaedrus tells of the maker of substantial and solid things whom he had known on earth: Eupalinos, the architect, and of the principles and methods which guided him in his work.

ONE OF THE PRINCIPLES OF THE ARCHITECT, EUPALINOS: "NO DETAILS IN EXECUTION."

PHAEDRUS. But whence, O Socrates, can proceed this bent for the eternal which is sometimes to be noticed among the living? You pursued knowledge. Men of the grosser sort try desperately to preserve the very bodies of the dead. Others build temples and tombs which they strive to render indestructible. The wisest and best inspired of men wish to give to their thoughts a harmony and a cadence which shall guard them against change and oblivion.

SOCRATES. You see clearly, O Phaedrus, what folly it is t But the Fates have decreed that among the things indispensable to the race of men, there must figure some insensate desires. There would be no men without love. Nor would science exist without absurd ambitions. And whence, think you, have we drawn the primal idea and the energy for those immense efforts which have raised so many illustrious and useless monuments which Reason admires, though she would have been incapable of conceiving them?

PHAEDRUS. But Reason had yet some part in the matter. All, without her, would be level with the earth.

SOCRATES. All.

PHAEDRUS. Do you remember those constructions that we saw building at the Piræus?

SOCRATES. Yes.

PHAEDRUS. Those engines, those efforts, tempered by the music of flutes, those operations so exact, that progress, at once so mysterious and so clear? What confusion at the first,

melting as it seemed into order! What solidity, what rigour were engendered between those plumb-lines, and along those frail cords stretched so as to be just grazed by the growing layers of brick!

SOCRATES. I preserve that fine memory. O materials! Beautiful stones! . . . O how light are we become!

PHAEDRUS. And that temple without the walls, near the altar of Boreas—do you remember?

SOCRATES. The temple of Artemis, the Huntress?

PHAEDRUS. The very one. One day we were out there. We were discoursing of Beauty . . .

SOCRATES. Alas!

PHAEDRUS. I was a close friend of him who built that temple. He came from Megara and was called Eupalinos. He gladly spoke to me of his art, of all the care and of all the knowledge that it requires; he made me understand everything that I saw with him in his workshop. I observed above all his astounding mind. I found in him the power of Orpheus. He foretold their monumental future to the shapeless heaps of stones and beams that lay around us; and these materials, at his voice, seemed dedicated to the one and only place to which the fates propitious to the goddess would have assigned them. How wonderful were his instructions to the workmen! There was left there no trace of his difficult meditations of the night before. He gave them nothing but commands and figures.

SOCRATES. That is the very way of God.

PHAEDRUS. His instructions and their acts fitted together so happily, that it seemed as though these men were nothing more nor less than his limbs. You cannot believe, Socrates, what a joy it was for my soul to have knowledge of a thing so well regulated. I no longer separate the idea of a temple from that of its edification. When I see one, I see an admirable action, yet more glorious than a victory and more contrary to wretched nature. Destroying and constructing are equal in importance, and we must have souls for the one and the other; but constructing is the dearer to my mind. O most happy Eupalinos!

SOCRATES. What enthusiasm of a shade for a phantom! I did not know this Eupalinos. Was he, then, a great man? I perceive that he rose to the supreme knowledge of his art.

Is he here?

PHAEDRUS. Doubtless he is amongst us; but I have never yet met him in this land.

SOCRATES. I know not what he could build here. Here our very projects are memories. But reduced as we are to the sole pleasures of conversation, I should be glad to listen to him.

PHAEDRUS. I have retained some of his precepts. I scarcely know if they would please you. They certainly enchant me.

SOCRATES. Can you repeat me any of them?

PHAEDRUS. Well, listen. He used very often to say: There are no details in execution.

SOCRATES. I understand and do not understand. I understand something, and I am not sure that it was really what he meant.

PHAEDRUS. And I am certain that your subtle wit has not failed to catch his meaning. In a soul as clear and as complete as yours, it must come to pass that a craftsman's maxim assumes a force and range that is entirely new. If it be truly perspicuous, and drawn directly from the work by a swift act of the mind, that sums up experience, without giving itself time to go astray, such a maxim is precious matter for the philosopher; it is an ingot of raw gold that I hand to you, goldsmith!

SOCRATES. I was the goldsmith of my chains! But let us consider this precept. . . . Take the art of the surgeon. The most skilful operator in the world, who puts his busy fingers into your wound, be his hands never so light, so experienced, so discerning; however surely he feel the position of the organs and the veins, their interrelation and their depth; however great be his certitude about the acts which he intends to accomplish in your flesh, about the things to be cut away and the things to be reunited; if through a circumstance that has escaped his attention, some thread, some needle he is using, some nothing that is of use for his operation, be not strictly

pure, or sufficiently purified, he kills you. You are dead . . . PHAEDRUS. Fortunately the thing is done! That is precisely what happened to me.

SOCRATES. You are dead, I say, you are dead, cured accordingly to all the rules; for, once all the demands of art and those of the moment have been complied with, Thought lovingly contemplates her work. But you are dead. A strand of ill-prepared silk has made science a murderess; this slightest of details has brought to nothing the work of Aesculapius and Athena.

PHAEDRUS. Eupalinos knew that well.

SOCRATES. It is so in all domains, excepting that of the philosophers, whose great misfortune it is that they never see the universes they imagine collapse, since they do not exist.

PHAEDRUS. Eupalinos was the man of his precept. He neglected nothing. He ordered small laths to be cut following the grain of the wood, so that, when placed between the masonry and the beams which rested thereon, they should prevent the damp from rising into the fibre and rotting it when once absorbed. He gave a like care to all the sensitive points of the building. You would have thought that it was his own body he was tending. During the process of construction he scarcely left the works. I truly believe that he knew every stone in the place. He saw to the precision of their cutting; he minutely studied all the means that have been thought of for preventing the edges from being injured and the exactness of the joining from being impaired. He directed carvings to be contrived, toothings to be left, sloping edges to be made in the marble facings. He took the most exquisite pains with the coatings of polish which he ordered to be spread over the walls of plain stone.

But all these delicate devices, making for the permanence of the edifice, were as nothing to those which he bestowed when he elaborated the emotions and vibrations of the soul of the future beholder of his work. For the light he prepared a matchless instrument, which was to redistribute it, endowed with intelligible forms and almost musical properties, into the space where mortals move. Like those orators and poets you had in mind just now, he knew, O Socrates, the mysterious virtue of imperceptible modulations. None perceived, when confronted by a mass so delicately lightened and so simple of aspect, that he was being led to a sort of bliss by insensible curves, by minute and all-powerful inflexions, and by those deep-wrought combinations of the regular and the irregular which he had introduced and concealed, and made as imperious as they were indefinable. They caused the ever-shifting spectator, obedient to their invisible presence, to pass from vision to vision, and from great spells of silence to mutterings of delight, according as he advanced, retreated, approached again, and as he moved within the radius of the work, impelled by its influence, and the plaything of admiration alone. My temple, this man from Megara would say, must move men as they are moved by their beloved. . . . [TRANSLATED BY WILLIAM MCCAUSLAND STEWART].

Marginalia.

Mr. Percy Progress in the South of France.

Our old friend Percy, who did so much to bring up to date those desolate and uninteresting Wiltshire downs, buzzed over to Cannes for his holidays. With his clever friend Monsieur Force Propulsive he put up



quite a tidy little lot



of slap-up road signs. These, he rightly foresaw, would be a delight to any hot-stuff motorist who doesn't want to be troubled by any tommy-rotten stuff like scenery when he can think about Aix-les-Bains as he approaches Cannes. Three cheers for the glorious Riviera!

CORRESPONDENCE.

Legitimate Hoardings-

To the Editor of the Architectural Review.

SIR,—I appreciate the courtesy of your letter of May 27, and I shall be happy for you to publish my letter in the next issue of the architectural review. The British Poster Advertising Association has worked in close touch with the Scapa Society, and I think Sir Lawrence Chubb would tell you, if you were to approach him, that the Association is of good repute.

I feel that in all fairness you will not confuse enamel

Copyright Photo by " The Builder"



E. Guy Dawber, A.R.A., Architect

T. H. Kingerlee & Sons, Contractors

THE ZOO, WHIPSNADE PARK

DAMPNESS was evident in the outer walls of the old building that was altered to form the Restaurant, and to protect the special interior decorations from this dampness the walls were replastered, in two coats, with a 2 to 1 cement mortar mixed with 5 lb. of 'PUDLO' Brand waterproofer to each 100 lb. of the cement. A final skimming of neutral gypsum plaster was applied to receive the decorations. 'PUDLO' Brand waterproofer was also used in the cement roughcast on two old cottages on this estate to remedy the dampness caused by the penetration of driving rains. Copies of the specifications worked to will be supplied on request.

BRAND CEMENT WATERPROOFER

Ask for the Handbook of Cement Waterproofing-post free

KERNER-GREENWOOD & CO., LTD., MARKET SQUARE KING'S LYNN

Sole Proprietors and Manufacturers

Steelwork is often $\frac{1}{6}$ th the total price of a steel frame building



PHORPRES

(four times pressed)
The Symbol of Security

OF STEEL FRAME CONSTRUCTION



LLOYD'S BANK

is built with

1,500,000
PHORPRES BRICKS

Architects:
Sir John Burnett & Partners
and
Messrs.Campbell Jones,Sons & Smithers

Contractors : Messrs. Trollope & Colls Ltd. Cost depends on the load.

1/3rd of the load frequently due to brickwork.

Lighter bricks the solution.

Cellular bricks are from 20% - 50% lighter than solid bricks, yet their use involves no loss of structural strength.

Insulation of sound, heat and moisture improved by sealed multi-cellular construction — which cellular bricks give when built into a wall.

TO USE SOLID BRICKS IN STEEL FRAME CONSTRUCTION IS TO WASTE MONEY

Read the treatise by Donovan H. Lee, Structural Engineer, on "The Effect of the light weight of Cellular Fletton Bricks on the Structural Steelwork of Buildings."

Please write for a copy. Samples of Cellular Bricks, reports on tests, and full information will gladly be sent on application.

LONDON BRICK CO & FORDERS LTD.

The largest Brickmakers in the World

AFRICA HOUSE, KINGSWAY, LONDON, W.C.Z.

Telephone: HOLBORN 8282 (10 lines).

Telegrams: PHORPRES, WESTCENT, LONDON

signs and roadside notices as being part of the industry represented by my Association. We have no control over such, our concern being entirely with what are legitimate

When our industry is accused of that of which it is not blameworthy, a journal of the standing of the architectural review will, I know, deal justly with the matter.

Yours very truly,

THOMAS P. FLETCHER,

President.

—What are they?

To the President of The British Poster Advertising ASSOCIATION.

SIR,-Of course I would not confuse enamel signs and roadside notices with posters. I quite realize that you have no control over them. But you say that your concern What is is entirely with what are legitimate hoardings. a legitimate hoarding? I hope you will not think it impertinent of me to ask you for a definition of this.

Yours very truly,

EDITOR.

THE ARCHITECTURAL REVIEW.

More about the Academy.

To the Editor of the Architectural Review.

SIR,-I forgot to mention one' thing in my letter on the Royal Academy, which is, that although I am accustomed to Mr. Nevinson's attacks on the Royal Academy, I am surprised at his saying he never submits. If I am not much mistaken, Mr. Nevinson had a large picture hung in the R.A. not many years ago. And to my knowledge his name was down for some time for election on the list of candidates, and this could not have been done without his knowledge and consent. Mr. Nevinson rather asks for this reply, and although I like him personally and admire much of his work, I cannot help making it.

Yours faithfully,

ALGERNON TALMAGE.

A Voice from the United States and Another from Germany.

To the Editor of the Architectural Review.

SIR,-It seems most unfortunate that the first thought which comes to Dorothy Todd in thinking of recent tendencies in American Architecture, and the kindred articles discussed in her paper, should be the old adage concerning the silk purse and the sow's ear. It seems still more unfortunate that in expressing an opinion upon an important world-wide change in the social order she should have devoted so much of her time to broadcasting the failure of those swinish elements in the human mind whose primary strivings are always in the direction of greed, and the last for monetary gain. The writer's travels in the last few years have convinced him at least that these tendencies are not to be defined geographically with quite as much stringency as Miss Todd's article might seem to indicate.

Although mass production and distribution are much more prevalent in the United States than elsewhere, because of the ability of the masses to purchase more freely with their greater earnings, the situation is not necessarily hopeless, nor our contribution to progress negligible. Pro-gress invariably starts with the individual, the masses follow-and I for one am convinced that if Miss Todd had discounted hasty mass efforts as momentary failures (the public which may appear so dumb and gross to your writer has not purchased this stuff), and devoted her study to work of serious-minded and truth-loving workers in architecture and the industrial arts, her account would not have been so devoid of promise.

The high idealism which has always been responsible for the substantial phases of American progress will manifest itself in this field as it has in others. Unfortunately these spiritual qualities are not always evident to the passer-by in the market place, but their presence is inevitably felt in the end.

Even as all of the activities of the grosser elements of human thinking should not be attributed to those in the so we recognize the presence of sincere United States, thinkers in all lands, and deplore the constant reappearance of articles which seem to have anti this or anti that as their basis, thus making more difficult the attainment of that interchange of ideals and aspirations, as well as achieve-ments, which is bound to follow the recognition of the good in men wherever they may be conducting their respective activities.

Sincerely yours, Walter W. Kantack.

Mr. Kantack's appeal letter came opportunely from New York, for almost on the same day a letter arrived from the German architectural paper *Baukunst*. If we are indeed to promote "the attainment of that interchange of ideals and aspirations," which Mr. Kantack mentions, it is our duty to help *Baukunst*. This excellent paper, whose fine photographs of modern architecture and methods of production have so long been a delight and in advance of most other periodicals, is suffering from the effects of the trade

A piece of paper has been printed across the cover on which are the words Die "Bankunst" ist in Gefahr! It is most important that this useful publication should be saved.

Scottish Romanesque.



An original corbel in the apse of Dalmeny Church which has recently been restored. A further £3,500 is needed to rebuild the tower, and cheques should be addressed to A.G. Shaw Milles. Esq., W.S., 35 Queen Street, Edinburgh.



URIOSITIES OF



RCHITECTURE—IX



"L'Art Nouveau" in England at Long Eaton in 1903.

A New Tax.

That there could have been a window tax in the past is a proof that there could be a tax on superfluous architectural decoration new. A considerable revenue might be made by taxes on the following articles—

Half timbering where it performs no

structural purpose ... 6d. per creosoted plank Crested ridge tiles and terra-cotta gargoyles 1d. each. Outside aspidistra and geranium stands 2d. each. Ornamental stained glass for front doors

6d. a design. It has been calculated that houses taxed on this basis would yield a yearly income of £1,836,723,000 in Metroland alone.

Two German Publications.

Of the two interesting monthlies published by Alexander Koch, Darmstadt, Deutsche Kunst und Dekoration and Innen Dekoration, the latter is of more practical interest to architects and interior decorators. The July number, which was more especially devoted to furniture (at the Berlin Building Exhibition), had some very interesting examples designed by such well-known architects as Professor Walter Gropius, Mies van der Rohe, Marcel Breuer, Carl Otto and Jan Ruhtenberg, Brüder Luckhardt, Professor Franz Schuster and Professor Willy Erb. The majority of this furniture is of steel, although there is some, for example that by Professor Franz Schuster, in wood and cane. There are incidentally some excellent light fittings. The illustrations show the able planning and well-thought-out arrangement of built-in cupboards, etc., into the space available. From any point of view in interior decoration, but especially from that of furniture, this issue of Innen Dekoration is of real value.

The Architectural Association.

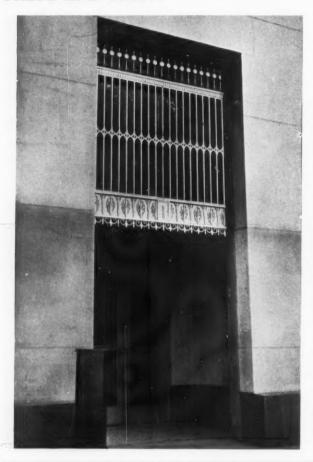
The exhibition of students' work held in the middle of July at the Architectural Association showed a tendency on the part of the older students to break away from the styles of the

knighted English architects. "A small Naval Museum" and "an electric service bureau" were quite original compositions. Nevertheless the colour schemes were sometimes repulsive, the result no doubt of a confusion between "jazz-modern" and "modern." The latter is no more than logical traditionalism, the former is nothing at all. The draughtsmanship of the first-year students seemed to be remarkably good.

MARBLE



The New India Building. Joint Architects:
Briggs & Thornely, FF.R.I.B.A., and H. J. Rowse, F.R.I.B.A.



Steel and aluminium have become in recent years the two almost inevitable and most important metals in modern building; steel chiefly in construction and aluminium in decoration. Their use is still increasing, and accordingly booklets and pamphlets containing the latest information and suggestions are continually being issued. The British Aluminium Company in its latest booklet gives instances of the use of aluminium in both the exterior and interior decoration of buildings—exterior and interior doors, staircases, fittings, roofing and ceilings, furniture, interior panelling and exterior decoration. Most of the examples come from America where aluminium is used more universally than here. This is perhaps more of an advantage than otherwise in a catalogue whose aim is to increase the use of aluminium in this country. The illustration is of a cast aluminium grille.

The inset pieces of wallpaper forming Plates IV to VIII of this issue are of the actual paper made by Messrs. John Line and Sons, Ltd., 213-16 Tottenham Court Road, W.r, and the photographs taken in their factory at Kentish Town show the printing in progress. Although this firm also makes machine-printed paper in great quantities, it specializes in the production of hand-printed wallpaper in the manufacture of which the greatest skill and care are used. The possible variations of the design have been increased by the introduction of the "Studies in Harmony" series, where shades and tonings are blended suggestively so that it is possible to suit special requirements by the use of special stocks and to give the greatest scope to individual taste and to the architect and interior decorator in evolving special colour schemes. To show the variety of these designs to better advantage the firm's showrooms, both in London and the provinces, are decorated with various combinations from the series. The firm will gladly furnish fuller details to anyone who cares to apply for them.

An interesting amalgamation has taken place in connection with electrical heating systems. The three methods of electric heating, the Unity tubular heater, the Morganite, and the Electrorad systems will now be dealt with by Messrs. Barker, Young & Co., who will in future be solely responsible in Great

Automatic Heating

Clean, noiseless and efficient. No fuel storage or handling, no ash removal.

IDEAL GAS BOILERS

Automatic gas control prevents overheating or waste. Ground edges of sections make gastight joints.

Quiet burning-no backfiring.

Construction ensures complete combustion of gas and absorption of heat.

Flue surfaces easily accessible for cleaning.

Insulated jacket conserves heat.

Black and grey enamel finish gives handsome appearance.

For 150 to 900 sq. ft. of radiation or 22 to 135 gallons of water per hour raised through 100°

Illustrated Price Lists post-free.



NATIONAL RADIATOR COMPANY

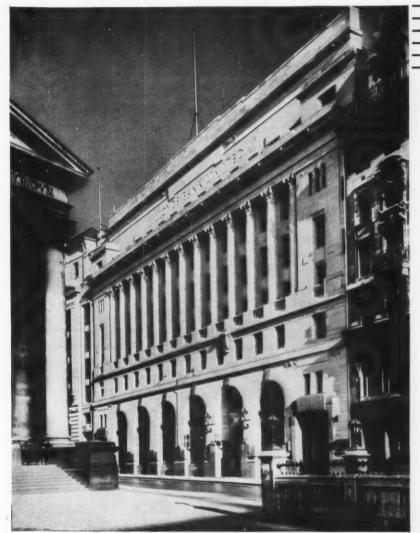
IDEAL WORKS, HULL, YORKS.

London Showrooms: Ideal House, Great Marlborough Street, W.1

Birmingham Showroom: 35 Paradise Street.

Brighton Showroom: 48 Grand Parade,

HEATING HADEN



Architects: Sir John Burnet, Tait & Lorn, and Campbell Jones, Sons, & Smithers.
Consulting Engineer: Dr. Oscar Faber, O.B.E., M.Inst.C.E.

LLOYDS BANK . . . Lombard Street and Cornhill.

IT is almost impossible to present a problem in Heating or Electrical Engineering that cannot be matched in the many thousand of Haden Heating and Electrical installations already planned and successfully carried out. Whatever the problem, and however unusual or difficult, we will solve it with efficiency and economy. Our experience is your guarantee of satisfaction.

The following heating contracts, each one entirely different in character and planning, have been completed by us during the past few months.

Lloyds Bank, Lombard Street and Cornhill.

New Whitgift Grammar School, Croydon.

(See Editorial illustrations of these two buildings)

School of Hygiene and Tropical Medicine.

Parliament Buildings, Belfast.

India House, Aldwych, London.

Ninth Church of Christ Scientist.

The New Law Courts, Belfast.

G. N. HADEN & SONS

LIMITED

TROWBRIDGE ... LONDON ... MANCHESTER

Glasgow, Dublin, Birmingham, Lincoln, Bournemouth, Torquay, Eastbourne, Newcastle, Liverpool, Bristol.

Britain and the Irish Free State for their marketing. The Unity tubular heater is manufactured by Messrs. Young, Osmond and Young, Ltd., and has been marketed by them, the Morganite system by the Morgan Crucible Co., and the Electrorad system is manufactured by the National Radiator Company, and marketed by The Electro Gas Development Co., Ltd. These three systems in the past were commercially competitive, but it was decided that they were fundamentally the same, and only differed solely in the way in which the heating was diffused in the room, and that it would be to the advantage of architects and builders as well as to the manufacturers themselves if they amalgamated. In future, therefore, the firm of Messrs. Barker, Young & Co. will, with a fully qualified technical staff, be prepared to give advice and assistance on all electrical heating problems.

The general contractors for Lloyds Bank, Lombard Street and Cornhill, were Trollope & Colls, Ltd., who were also responsible for the foundations, concrete blocks, reinforced concrete, fireproof construction, gas fixtures, gas fitting, plumbing, plaster, decorative plaster, stonework, furniture, cranes, and water supply. Among the artists, craftsmen, and sub-contractors were the following: Gilbert Bayes (sculpture); M. Morecan and P. Harris (models for medallions); Joseph Armitage and George Hardie (carving); B. Goodman, Ltd. (demolition and excavation); Val de Travers, Ltd. (dampcourses, asphalt and waterproofing materials); London Brick Co. and Forders, Albion Iron Works, and Sneyd Collieries (bricks); Bath and Portland Stone Co., Ltd. (stone); Redpath, Brown & Co., Ltd. (structural steel); Cork Insulation Co. (special roofing); Shepwood Partition Brick Co., Ltd. (partitions); Compton Bros. and Nicholls and Clark ("Vita" glass); Henry Hope and Sons, Ltd., and The Crittall Manufacturing Co., Ltd. (patent glazing); Diespeker & Co., Marus Flooring Co., and Macinlop & Co. (patent flooring); Haden and Sons (biolers, central heating and ventilation); Benham and Sons (kitchen fittings); Siemens Bros. Ltd., Edison Swan Electric Co., Ltd., Osler & Faraday, Ltd., Birmingham Guild, Ltd. (electric light fixtures); Restlight, Ltd. (artificial daylight illuminations); Drake and Gorham, Ltd. (electric wiring, electric heating, and bells); Geo. Jennings & Co. (sanitary fit-

tings); Macinlop & Co. and Diespeker (stair treads); J. Gibbons, Ltd., and G. O'Brien Baker, Ltd. (door furniture); Crittall Manufacturing Co., Ltd., and Henry Hope and Sons, Ltd. (casements); James Gibbons, Ltd., Crittall Manufacturing Co., and Henry Hope (window furniture); Relay Automatic (telephones); Arthur Gibson & Co., Ltd. (rolling shutters); Chatwood Safe Co., Ltd., and the Milner Safe Co. (safes and strongroom doors and grilles); J. Avery (sunblinds); May Construction Co. (plaster); H. H. Martyn, Ltd., Birmingham Guild, Ltd., and Morris-Singer Co. (metalwork); George Parnall & Co., S. Elliott and Sons, Ltd., and F. Tibbenham, Ltd. (joinery); Fenning & Co., Ltd., and H. T. Jenkins, Ltd. (marble); Simpson and Sons, Ltd. (tilling); Shoolbreds, Ltd. (textiles); Sanderson & Co., Ltd. (wallpapers); Bath Artcraft Co., Ltd. (furniture); Sankey Sheldon, Ltd., Roneo, Ltd., and Art Metal Construction Co. (office fittings); Sankey Sheldon, Ltd. (cloakroom fittings); Waygood-Otis, Ltd. (lifts).

The general contractors for the New Whitgift Grammar School were E. H. Smith & Co., Ltd., who were also responsible for the excavation, foundations, dampcourses, iron staircases, joinery and plumbing. Among the artists, craftsmen, and subcontractors were the following: Val de Travers (asphalt); Ames & Finnis (brick and steel); Wottons (patent glazing); Stoner & Saunders (cast lead); Stevens & Adams (oak and maple flooring); Walters, Ltd. (patent flooring); R. I. W. Products, Ltd. (waterproofing materials); G. N. Haden, Ltd. (central heating, boilers and ventilation); Southwell & Marriage (grates, sanitary fittings); Croydon Gas Co. (gas fittings); C. Harvey & Co. (electric wiring); James Gibbons, Ltd. (door furniture); Diespeker & Co., Ltd. (stairs); W. James & Co. (casements and window furniture); Gillett and Johnston (bells and clocks); Gibson of Twickenham (gymnasium rolling shutters); James Walker (decorative plaster); F. Jukes (metalwork); Carters of Brockley (wall tiling); Bennet Furnishing Co. (school fittings); Lockerbie & Wilkinson (cloakroom fittings); Croydon Water Co. (water-softening plant). The consulting engineer was J. F. Farquharson, M.I.Struct.E., and the clerk of works was F. J. Pitts.



GEORGE WRAGGE

LTD.

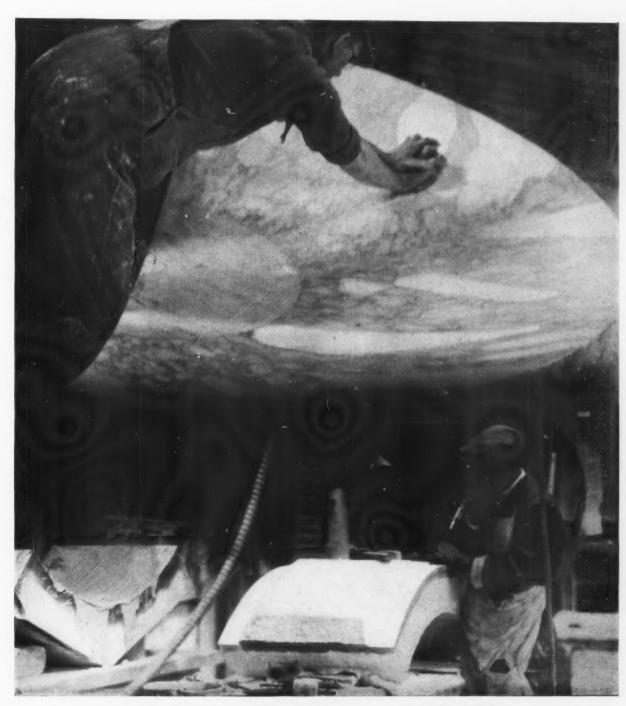
CHAPEL STREET, SALFORD, MANCHESTER

CLOCK HOUSE, ARUNDEL ST., LONDON, W.C.2

> NATIONAL PROVINCIAL BANK, LEATHERHEAD.

F. C. R. Palmer, Esq., F.R.I.B.A., Architect. W. F. C. Holden, Esq., F.R.I.B.A., Asst. Architect.

STEEL CASEMENTS
LEADED LIGHTS



FENNING FOR MARBLE AND GRANITE

PALACE WHARF, RAINVILLE ROAD, HAMMERSMITH, LONDON, W.6
FULHAM 6142-3

The general contractors for the Malmaison Restaurant Stratton Street, W.I, were Holloway Bros., Ltd., who were also responsible for the stone, joinery, cloakroom fittings, and interior decoration. Among the artists, craftsmen, and sub-contractors were the following: Redpath Brown & Co. (structural steel); Chance Bros. (glass); T. & W. Farmiloe (polished plate glass); Hollis Bros, Ltd., (wood-block flooring); The Asbestos Cement Building Products, Ltd. (patent flooring); H. J. Cash & Co., Ltd. (central heating, gasfitting, electric wiring, ventilation and bells); The Briffault Range Co., Ltd. (stoves and gas fixtures); Bagues, Ltd. (electric light fixtures); Matthew Hall & Co., Ltd. (plumbing); J. R. Venning, Ltd. (sanitary fittings); Carter & Co. (terrazzo stair-treads); J. Gibbons, Ltd. (door furniture, canopy and metalwork of casements and entrance); Bostwick Gate &

Shutter Co. (folding gates); J. W. Francis & Co., Ltd. (rolling shutters); J. Elliotts & Sons, Ltd. (revolving doors); G. Rouse & Co., Ltd. (plaster and decorative plaster); J. Whitehead & Sons, Ltd. (marble); Marten van Straten & Co. (wall tiling); Stratton House, Ltd., and Isles & Co. (water supply); The Borough Syndicate Co. ("Neon" signs); J. H. Ball & Co., Ltd. (tinted decorative mirrors); and James Clark & Son (pressed glass for the entrance door and marquise).

The general contractors for the National Flying Services Shop, Grand Buildings, Trafalgar Square, were H. Darby & Son, who were entirely responsible for the building and fittings. The enamelled steel furniture and fabrics were supplied by Modern Interiors, Ltd.

A LONDON DIARY.

SATURDAY, AUGUST	1		
The Romans and their Art	12 noon.	BRITISH	MUSEUM
Life and Arts of the Middle Ages.	12 ноон.	17	99
The Story of Man: Ur to			**
A Sectional Tour Ecclesiastical Metalwork	3 h.m.		
Ecclesiastical Metalwork	12 110011.	V. AND A	MUSEUM
Continental Plate Indian Section : Buddhist	3 p.m.		
Indian Section : Buddhist	3 b.m.	**	
Art.	3 7		3.7
Early Costumes	7 b.m.	44	4.5
Oriental Pottery	7 p.m.	21	**
Exhibition of Modern	10-6	**	**
Posters.	Sun. 2.30-	-6	**
Early Costumes Oriental Pottery Exhibition of Modern Posters. Exhibition of Collection of Indian Fine Arts.	10-6	9.9	9.9
Gothic Art in the North and the South.	2 p.m.	NATIONAL	L GALLERY
Gothic Art in the North and the South.			9.9
Portraits	II a.m.	TATE GAL	LERY
	12 8008.		11
Dutch Pictures Exhibition of Modern	12 noon.	WALLACE	COLLECTION
Exhibition of Modern	10-6	THE GOUL	PIL GALLERY
English Art.	Sat. 10-1	5 REGE	NT ST., S.W.
English Art. Exhibition of Work by	10-6	THE LED	CESTER GAL
Rodin.	Sat. 10-1	SO., W.	, LEICESTER
Exhibition of Modern	10-6	THE RE	DFERN GAL
English Artists.	Sat. 10-1		27 OLD BONE
Twenty-seventh Annual	10-6	WALKERS	GALLERIES
Exhibition of Early English Watercolours.	Sat. 10-1	118 NI W.1	W BOND ST.

CHINE AND ANDRIOR	-			
SUNDAY, AUGUST				
			V. AND	A. MUSEUM
Persian Treasures		4 p.m.	91	9.9
MONDAY, AUGUST	3-	_		
Mesopotamia—I: Sum to 2000 B.C.	er	12 10011.	BRITISH	MUSEUM
Egypt-I: Life and Ar			2.2	21
Egypt-I: Life and Ar	rts	3 p.m.	11	17
Mesopotamia—I: Sumo to 2000 B.C.	er	3 p.m.	XX	23
General Tour		I2 noon.	V. AND	A. MUSEUM
English Paintings		12 noon.	22	17
General Tour		3 p.m	**	11
				11
General Tour		7 p.m.	22	21
Italian Masterpieces		7 p.m.	9.2	11
No Lecture		Assess	NATIONA	L GALLERY
No Lecture		-	TATE GA	LLERY
No Lecture			WALLACI	E COLLECTION
TUESDAY, AUGUST	4			
Mesopotamia - II		12 noon.	BRITISH	MUSEUM
Egypt-II: Monumen	its	12 ncon.	**	22
Egypt-II: Monumen	its	3 p.m.	22	11
Egypt — III: Life at Arts, 300-1600 B.C	nd	3 p.m.	9.9	11
Goldwork and Jewellers	,	7.2 810011	V AND	A. MUSEUM
Precious Stones				A. MUSEUM
Veronese and Ferrarese		1 p.m.	NATIONA	AL GALLERY
		2 p.m.		
Blake and Watts		II d.m.	TATE GA	LLERY
ATHERE WITH WHITE		12 110011	02	
French Furniture—I		3 b.m.	WALLAC	E COLLECTION
		3 8		

		12 noon.	BRITISH	MUSEUM
Early Greece		12 noon.	21	11
Early Age of Italy		3 b.m.	11	
Mesopotamia - II		3 p.m.		
Tapestries		12 noon.	V. AND	. MUSEUM
Ironwork		3 b.m.	22	22
Indian Section : Ar- ture.	chitec-	3 p.m.	11	93
Realism				
,,		12 noon.	21	**
Hogarth and the teenth Century.	Eigh-	II a.m.	TATE GA	LLERY
Hogarth and the teenth Century.	Eigh-	12 110011.	99	99
THURSDAY, AUC			RDITISH	MUSEUM
ture—I : Greek.	range C.	As noon.	arena 1 L 381	
		12 noon.		11
Early Age of Italy Early Britain—I Stone Age).				20
Early Age of Italy Early Britain—I Stone Age). Life and Arts of the Races—I: Asia	e Dark	3 p.m.	,,	21
Early Age of Italy Early Britain—I Stone Age). Life and Arts of the Races—I: Asia Vestments—I	Dark	3 p.m. 12 noon.	,,	21
Early Age of Italy Early Britain—I Stone Age). Life and Arts of the Races—I: Asia Vestments—I Vestments—II	e Dark	3 p.m. 12 noon. 3 p.m.	,,	21
Early Age of Italy Early Britain—I Stone Age). Life and Arts of the Races—I: Asia Vestments—I Costumes, Seven Century.	e Dark	3 p.m. 12 noon. 3 p.m. 7 p.m.	V. AND .	A. MUSEUM
Early Age of Italy Early Britain—I Stone Age). Life and Arts of the Races—I: Asia Vestments—I Costumes, Seven Century.	e Dark	3 p.m. 12 noon. 3 p.m. 7 p.m.	V. AND	A. MUSEUM
Early Age of Italy Early Britain—I Stone Age). Life and Arts of the Races—I: Asia Vestments—I Costumes, Seven	e Dark	3 p.m. 12 noon. 3 p.m. 7 p.m. 7 p.m.	v. AND	A. MUSEUM
Early Age of Italy Early Britain—I Stone Age). Life and Arts of the Races—I: Asia Vestments—I Costumes, Seven Century. Raphael Cartoons Early Flemish	e Dark	3 p.m. 12 noon. 3 p.m. 7 p.m. 7 p.m. 11 a.m. 12 noon.	V. AND	A. MUSEUM
Early Age of Italy Early Britain—I Stone Age). Life and Arts of the Races—I: Asia Vestments—I: Costumes, Seven Century. Raphael Cartoons Early Flemish English Watercolor	teenth	3 p.m. 12 noon, 3 p.m. 7 p.m. 11 a.m. 12 noon.	V. AND NATIONA TATE GA	A. MUSEUM
Early Age of Italy Early Britain—I Stone Age). Life and Arts of the Races—I: Asia Vestments—I: Costumes, Seven Century. Raphael Cartoons Early Flemish English Watercolor	teenth	3 p.m. 12 noon. 3 p.m. 7 p.m. 17 p.m. 11 a.m. 12 noon. 12 noon. 12 noon.	V. AND NATIONA TATE GA	A. MUSEUM





YOUR PROPERTY IS JUST AS IMPORTANT

to you. The reasons why the nation's property—public buildings, bridges, lighthouses, battleships and liners—is coated with Lead Paint apply equally to private houses, garages, greenhouses and other

structures. Lead Paint looks better and lasts longer, saving considerable expense in repairs. White Lead Paints can be obtained tinted to suit a wide variety of colour requirements.

"There is no efficient substitute for Lead Paint."—Home Office Departmental Committee.



Write for a FREE Copy of this interesting and informative Booklet. LEAD PAINT LASTS

WHITE LEAD PUBLICITY BUREAU, 36-37 KING STREET, LONDON, E.C.2

Telephone: METROPOLITAN 1757

